

## WEST Search History

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DATE: Friday, January 06, 2006

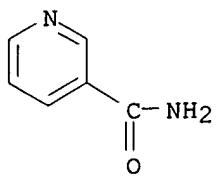
[Hide?](#) [Set](#) [Query](#)  
[Name](#)

*DB=PGPB,USPT,EPAB; PLUR=YES; OP=OR*

- L19 L17 and L12
- L18 L17 and L11
- L17 L4 and L5
- L16 (L4 and L5)![CCLS]
- L15 (L4 and L5)[CCLS]
- L14 L13 and prodrug
- L13 L12 and L11
- L12 NRH
- L11 NQO2
- L10 L5 and L9
- L9 L8 or L7
- L8 (424/78.14)![CCLS]
- L7 (514/183 |514/485)![CCLS]
- L6 carboxamidomethyl adj dihydronicotinamide
- L5 CB1954 or (CB-1954) or (CB 1954)
- L4 knox.in.
- L3 knox
- L2 burke.in.
- L1 ("4440859"|"4530901"|"4582800"|"4677063"|"4678751"|"4704362"|"4710463"|"4757006"

END OF SEARCH HISTORY

RN 98-92-0 REGISTRY  
ED Entered STN: 16 Nov 1984  
CN 3-Pyridinecarboxamide (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN Nicotinamide (8CI)  
OTHER NAMES:  
CN  $\beta$ -Pyridinecarboxamide  
CN 3-(Aminocarbonyl)pyridine  
CN 3-Amidopyridine  
CN 3-Carbamoylpyridine  
CN 3-Pyridinecarboxylic acid amide  
CN Aminicotin  
CN Benicot  
CN Delonin Amide  
CN Dipegyl  
CN m-(Aminocarbonyl)pyridine  
CN NAM  
CN Niacinamide  
CN Niavit PP  
CN Nicamina  
CN Nicamindon  
CN Nicasir  
CN Nicobion  
CN Nicofort  
CN Nicosan 2  
CN Nicosylamide  
CN Nicotilamide  
CN Nicotine acid amide  
CN Nicotinic acid amide  
CN Nicotinic amide  
CN Nicotylamide  
CN Nicovit  
CN Nicovitina  
CN Nictoamide  
CN Niocinamide  
CN Niozymin  
CN NSC 13128  
CN NSC 27452  
CN Papulex  
CN Pelmin  
CN Pelmine  
CN Pelonin amide  
CN Vi-Nicotyl  
CN Vitamin B  
CN Vitamin B3  
FS 3D CONCORD  
DR 123574-63-0, 37321-14-5, 78731-47-2  
MF C6 H6 N2 O  
CI COM  
LC STN Files: ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN\*,  
BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS,  
CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM,  
CSNB, DDFU, DETHERM\*, DIOGENES, DRUGU, EMBASE, GMELIN\*, HODOC\*, HSDB\*,  
IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK\*, MSDS-OHS, NAPRALERT,  
NIOSHTIC, PDLCOM\*, PHAR, PIRA, PROMT, PROUSDDR, PS, RTECS\*, SPECINFO,  
TOXCENTER, USAN, USPAT2, USPATFULL, VTB  
(\*File contains numerically searchable property data)  
Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*, WHO  
(\*\*Enter CHEMLIST File for up-to-date regulatory information)



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

9025 REFERENCES IN FILE CA (1907 TO DATE)  
402 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
9036 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
9 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

N 952-92-1 REGISTRY

ED Entered STN: 16 Nov 1984

CN 3-Pyridinecarboxamide, 1,4-dihydro-1-(phenylmethyl)- (9CI) (CA INDEX  
NAME)

OTHER CA INDEX NAMES:

CN Nicotinamide, 1-benzyl-1,4-dihydro- (6CI, 7CI, 8CI)

OTHER NAMES:

CN 1,4-Dihydro-1-(phenylmethyl)-3-pyridinecarboxamide

CN 1,4-Dihydro-N-benzylnicotinamide

CN 1-Benzyl-1,4-dihydronicotinamide

CN 1-Benzyl-3-carbamido-1,4-dihdropyridine

CN 1-Benzyl-3-carbamoyl-1,4-dihdropyridine

CN BNAH

CN N-Benzyl-1,4-dihydronicotinamide

CN N-Benzyl-3-carbamoyl-1,4-dihdropyridine

CN N-Benzylidihydronicotinamide

CN NSC 26899

FS 3D CONCORD

DR 174307-50-7, 84062-23-7

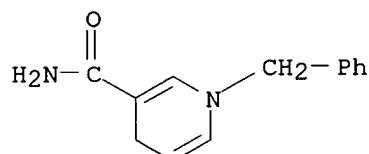
MF C13 H14 N2 O

CI COM

LC STN Files: AGRICOLA, BEILSTEIN\*, BIOSIS, CA, CAOLD, CAPLUS, CASREACT,  
CHEMCATS, CHEMINFORMRX, CSCHEM, GMELIN\*, IFICDB, IFIPAT, IFIUDB,

MEDLINE, PIRA, PROMT, TOXCENTER, USPATFULL

(\*File contains numerically searchable property data)



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

582 REFERENCES IN FILE CA (1907 TO DATE)

10 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

582 REFERENCES IN FILE CAPLUS (1907 TO DATE)

31 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

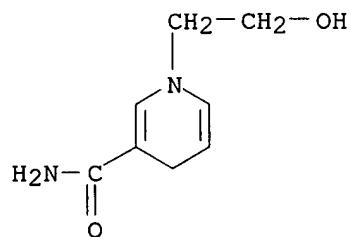
RN 9037-41-6 REGISTRY  
ED Entered STN: 16 Nov 1984  
CN Reductase, nitro- (9CI) (CA INDEX NAME)  
OTHER NAMES:  
CN 2,4,6-Trinitrotoluene nitroreductase  
CN 3-Nitrophenol reductase  
CN 4-Nitrobiphenyl reductase  
CN Aromatic nitroreductase  
CN Dinitropyrene nitroreductase  
CN Nitrobenzene nitroreductase  
CN Nitrobenzene reductase  
CN Nitrobenzoic acid reductase  
CN Nitrophenol reductase  
CN Nitroreductase  
CN Nitroreductase (NADH)  
CN PETN reductase  
CN TNT nitroreductase  
MF Unspecified  
CI MAN  
LC STN Files: ADISNEWS, AGRICOLA, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CAPLUS, CEN, CIN, EMBASE, PIRA, PROMT, TOXCENTER, USPAT2, USPATFULL

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

663 REFERENCES IN FILE CA (1907 TO DATE)  
11 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
666 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L6 ANSWER 27 OF 45 REGISTRY COPYRIGHT 2006 ACS on STN  
RN 7145-37-1 REGISTRY  
ED Entered STN: 16 Nov 1984  
CN 3-Pyridinecarboxamide, 1,4-dihydro-1-(2-hydroxyethyl)- (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN Nicotinamide, 1,4-dihydro-1-(2-hydroxyethyl)- (7CI, 8CI)  
OTHER NAMES:  
CN NSC 74259  
FS 3D CONCORD  
MF C8 H12 N2 O2  
LC STN Files: BEILSTEIN\*, CA, CAOLD, CAPLUS, TOXCENTER, USPATFULL  
(\*File contains numerically searchable property data)

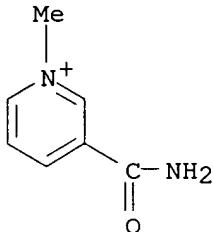


\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

6 REFERENCES IN FILE CA (1907 TO DATE)  
6 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L6 ANSWER 28 OF 45 REGISTRY COPYRIGHT 2006 ACS on STN

RN **6456-44-6** REGISTRY  
 ED Entered STN: 16 Nov 1984  
 CN Pyridinium, 3-(aminocarbonyl)-1-methyl-, iodide (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN 3-Carbamoyl-1-methylpyridinium iodide (6CI, 7CI)  
 CN Pyridinium, 3-carbamoyl-1-methyl-, iodide (8CI)  
 CN Pyridinium, 3-carbamyl-1-methyl-, iodide (4CI)  
 OTHER NAMES:  
 CN 1-Methylnicotinamide iodide  
 CN Nicotinamide methiodide  
 MF C7 H9 N2 O . I  
 SR CAS EARLY REGISTRATIONS  
 LC STN Files: BEILSTEIN\*, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMLIST,  
     CSCHEM, GMELIN\*, RTECS\*, TOXCENTER, USPAT2, USPATFULL  
     (\*File contains numerically searchable property data)  
 Other Sources: EINECS\*\*  
     (\*\*Enter CHEMLIST File for up-to-date regulatory information)  
 CRN (3106-60-3)

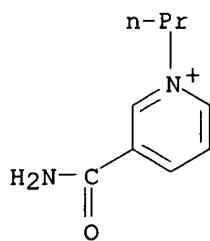


● I<sup>-</sup>

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

104 REFERENCES IN FILE CA (1907 TO DATE)  
 104 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
 19 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L6 ANSWER 29 OF 45 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN **5463-59-2** REGISTRY  
 ED Entered STN: 16 Nov 1984  
 CN Pyridinium, 3-(aminocarbonyl)-1-propyl-, iodide (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN 3-Carbamoyl-1-propylpyridinium iodide (6CI, 7CI)  
 CN Pyridinium, 3-carbamoyl-1-propyl-, iodide (8CI)  
 MF C9 H13 N2 O . I  
 LC STN Files: BEILSTEIN\*, CA, CAOLD, CAPLUS, HODOC\*, TOXCENTER, USPATFULL  
     (\*File contains numerically searchable property data)  
 CRN (13309-33-6)

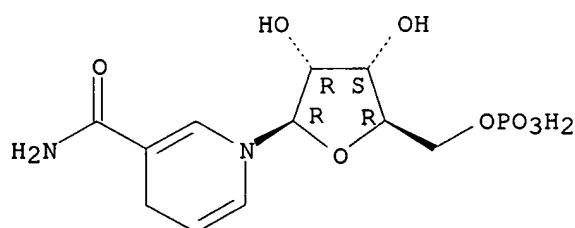


● I<sup>-</sup>

18 REFERENCES IN FILE CA (1907 TO DATE)  
 18 REFERENCES IN FILE CAPIUS (1907 TO DATE)  
 4 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L6 ANSWER 30 OF 45 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 4229-56-5 REGISTRY  
 ED Entered STN: 16 Nov 1984  
 CN 3-Pyridinecarboxamide, 1,4-dihydro-1-(5-O-phosphono-β-D-ribofuranosyl)- (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN Nicotinamide, 1,4-dihydro-1-β-D-ribofuranosyl-, 5'-(dihydrogen phosphate) (8CI)  
 CN Nicotinamide, 1,4-dihydro-1-β-D-ribofuranosyl-, 5'-phosphate (7CI)  
 OTHER NAMES:  
 CN β-NMNH  
 CN 1,4-Dihydronicotinamide mononucleotide  
 CN 1,4-Dihydronicotinamide ribonucleotide  
 CN Nicotinamide ribonucleotide, reduced  
 CN NMNH  
 CN NMNH<sub>2</sub>  
 CN Reduced nicotinamide mononucleotide  
 CN Reduced nicotinamide ribonucleotide  
 FS STEREOSEARCH  
 MF C11 H17 N2 O8 P  
 CI COM  
 LC STN Files: AGRICOLA, BEILSTEIN\*, CA, CAOLD, CAPIUS, CEN, TOXCENTER,  
 USPATFULL  
 (\*File contains numerically searchable property data)

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

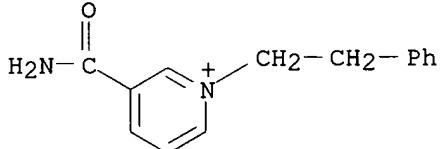
77 REFERENCES IN FILE CA (1907 TO DATE)  
 1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

77 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
4 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

N 667919-86-0 REGISTRY  
 ED Entered STN: 26 Mar 2004  
 CN Dehydrogenase, reduced nicotinamide riboside (quinone) (9CI) (CA INDEX  
     NAME)  
 OTHER NAMES:  
 CN Dihydronicotinamide riboside quinone oxidoreductase 2  
 CN Dihydronicotinamide riboside quinone reductase 2  
 CN Dihydronicotinamide riboside:quinone oxidoreductase  
 CN NQO2 oxidoreductase  
 CN NRH:quinone oxidoreductase  
 CN Reduced nicotinamide riboside (quinone) dehydrogenase  
 MF Unspecified  
 CI MAN  
 SR CA  
 LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*  
     35 REFERENCES IN FILE CA (1907 TO DATE)  
     35 REFERENCES IN FILE CAPLUS (1907 TO DATE)

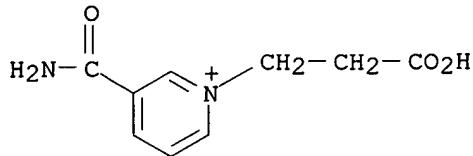
L6 ANSWER 2 OF 45 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 218443-93-7 REGISTRY  
 ED Entered STN: 29 Jan 1999  
 CN Pyridinium, 3-(aminocarbonyl)-1-(2-phenylethyl)-, iodide (9CI) (CA INDEX  
     NAME)  
 MF C14 H15 N2 O . I  
 SR CA  
 LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL  
 CRN (761385-40-4)



● I<sup>-</sup>

2 REFERENCES IN FILE CA (1907 TO DATE)  
 2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

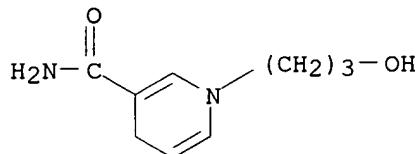
L6 ANSWER 3 OF 45 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 218443-92-6 REGISTRY  
 ED Entered STN: 29 Jan 1999  
 CN Pyridinium, 3-(aminocarbonyl)-1-(2-carboxyethyl)-, iodide (9CI) (CA INDEX  
     NAME)  
 MF C9 H11 N2 O3 . I  
 SR CA  
 LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL  
 CRN (717820-87-6)



● I<sup>-</sup>

2 REFERENCES IN FILE CA (1907 TO DATE)  
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

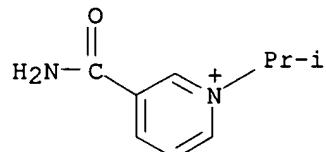
L6 ANSWER 4 OF 45 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 218443-91-5 REGISTRY  
 ED Entered STN: 29 Jan 1999  
 CN 3-Pyridinecarboxamide, 1,4-dihydro-1-(3-hydroxypropyl)- (9CI) (CA INDEX NAME)  
 FS 3D CONCORD  
 MF C9 H14 N2 O2  
 SR CA  
 LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

2 REFERENCES IN FILE CA (1907 TO DATE)  
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

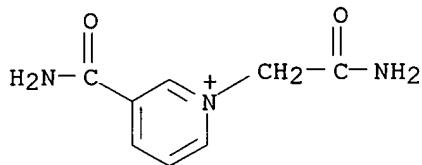
L6 ANSWER 5 OF 45 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 218443-90-4 REGISTRY  
 ED Entered STN: 29 Jan 1999  
 CN Pyridinium, 3-(aminocarbonyl)-1-(1-methylethyl)-, bromide (9CI) (CA INDEX NAME)  
 MF C9 H13 N2 O . Br  
 SR CA  
 LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL  
 CRN (745779-44-6)



● Br<sup>-</sup>

2 REFERENCES IN FILE CA (1907 TO DATE)  
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

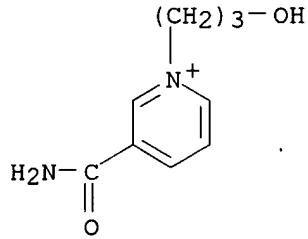
L6 ANSWER 6 OF 45 REGISTRY COPYRIGHT 2006 ACS on STN  
RN **218443-88-0** REGISTRY  
ED Entered STN: 29 Jan 1999  
CN Pyridinium, 3-(aminocarbonyl)-1-(2-amino-2-oxoethyl)-, iodide (9CI) (CA INDEX NAME)  
MF C8 H10 N3 O2 . I  
SR CA  
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL  
CRN (66822-26-2)



● I<sup>-</sup>

3 REFERENCES IN FILE CA (1907 TO DATE)  
3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L6 ANSWER 7 OF 45 REGISTRY COPYRIGHT 2006 ACS on STN  
RN **126298-92-8** REGISTRY  
ED Entered STN: 06 Apr 1990  
CN Pyridinium, 3-(aminocarbonyl)-1-(3-hydroxypropyl)-, bromide (9CI) (CA INDEX NAME)  
MF C9 H13 N2 O2 . Br  
SR CA  
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL  
CRN (83643-85-0)

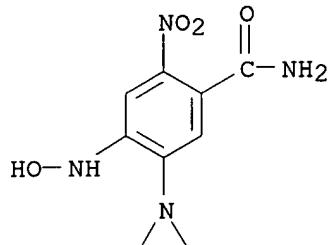


● Br<sup>-</sup>

4 REFERENCES IN FILE CA (1907 TO DATE)  
4 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L6 ANSWER 8 OF 45 REGISTRY COPYRIGHT 2006 ACS on STN  
RN **119643-82-2** REGISTRY  
ED Entered STN: 17 Mar 1989  
CN Benzamide, 5-(1-aziridinyl)-4-(hydroxyamino)-2-nitro- (9CI) (CA INDEX

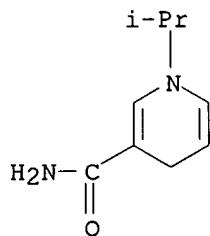
NAME)  
 FS 3D CONCORD  
 MF C9 H10 N4 O4  
 SR CA  
 LC STN Files: CA, CANCERLIT, CAPLUS, MEDLINE, TOXCENTER, USPATFULL



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

12 REFERENCES IN FILE CA (1907 TO DATE)  
 12 REFERENCES IN FILE CAPLUS (1907 TO DATE)

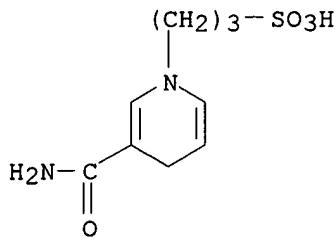
L6 ANSWER 9 OF 45 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 115503-79-2 REGISTRY  
 ED Entered STN: 30 Jul 1988  
 CN 3-Pyridinecarboxamide, 1,4-dihydro-1-(1-methylethyl)- (9CI) (CA INDEX  
 NAME)  
 FS 3D CONCORD  
 MF C9 H14 N2 O  
 SR CA  
 LC STN Files: BEILSTEIN\*, CA, CAPLUS, TOXCENTER, USPATFULL  
 (\*File contains numerically searchable property data)



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

5 REFERENCES IN FILE CA (1907 TO DATE)  
 5 REFERENCES IN FILE CAPLUS (1907 TO DATE)

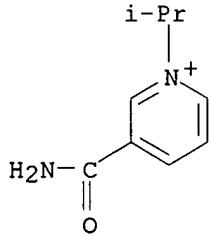
L6 ANSWER 10 OF 45 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 114554-11-9 REGISTRY  
 ED Entered STN: 21 May 1988  
 CN 1(4H)-Pyridinepropanesulfonic acid, 3-(aminocarbonyl)- (9CI) (CA INDEX  
 NAME)  
 OTHER CA INDEX NAMES:  
 CN 1(4H)-Pyridinepropanesulfonic acid, 3-carbamoyl- (6CI)  
 FS 3D CONCORD  
 MF C9 H14 N2 O4 S  
 SR CAOLD  
 LC STN Files: CA, CAOLD, CAPLUS, TOXCENTER, USPATFULL



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

3 REFERENCES IN FILE CA (1907 TO DATE)  
 3 REFERENCES IN FILE CAPIUS (1907 TO DATE)  
 1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

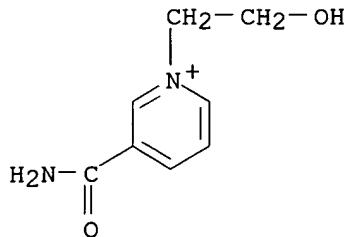
L6 ANSWER 11 OF 45 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 109942-74-7 REGISTRY  
 ED Entered STN: 22 Aug 1987  
 CN Pyridinium, 3-(aminocarbonyl)-1-(1-methylethyl)-, iodide (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN 3-Carbamoyl-1-isopropylpyridinium iodide (6CI)  
 MF C9 H13 N2 O . I  
 SR CAOLD  
 LC STN Files: BEILSTEIN\*, CA, CAOLD, CAPIUS, TOXCENTER, USPATFULL  
 (\*File contains numerically searchable property data)  
 CRN (745779-44-6)



● I<sup>-</sup>

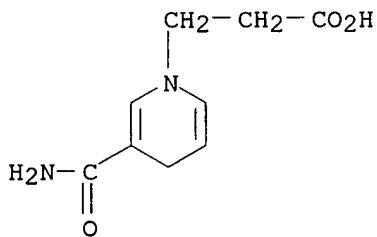
5 REFERENCES IN FILE CA (1907 TO DATE)  
 5 REFERENCES IN FILE CAPIUS (1907 TO DATE)  
 1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L6 ANSWER 12 OF 45 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 106047-77-2 REGISTRY  
 ED Entered STN: 10 Jan 1987  
 CN Pyridinium, 3-(aminocarbonyl)-1-(2-hydroxyethyl)-, iodide (9CI) (CA INDEX NAME)  
 MF C8 H11 N2 O2 . I  
 SR CA  
 LC STN Files: CA, CAPIUS, TOXCENTER, USPATFULL  
 CRN (66822-21-7)



4 REFERENCES IN FILE CA (1907 TO DATE)  
 4 REFERENCES IN FILE CAPLUS (1907 TO DATE)

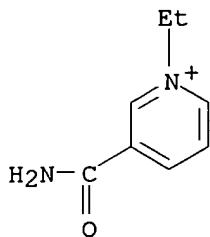
L6 ANSWER 13 OF 45 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 99362-74-0 REGISTRY  
 ED Entered STN: 07 Dec 1985  
 CN 1(4H)-Pyridinepropanoic acid, 3-(aminocarbonyl)- (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN 1(4H)-Pyridinepropionic acid, 3-carbamoyl- (6CI)  
 FS 3D CONCORD  
 MF C9 H12 N2 O3  
 SR CAOLD  
 LC STN Files: CA, CAOLD, CAPLUS, TOXCENTER, USPATFULL



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

3 REFERENCES IN FILE CA (1907 TO DATE)  
 3 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
 1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

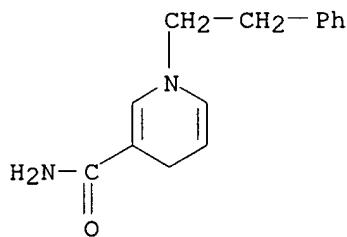
L6 ANSWER 14 OF 45 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 97009-81-9 REGISTRY  
 ED Entered STN: 01 Jul 1985  
 CN Pyridinium, 3-(aminocarbonyl)-1-ethyl-, iodide (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN 3-Carbamoyl-1-ethylpyridinium iodide (6CI)  
 CN Pyridinium, 3-carbamyl-1-ethyl-, iodide (4CI)  
 MF C8 H11 N2 O . I  
 LC STN Files: BEILSTEIN\*, CA, CAOLD, CAPLUS, TOXCENTER, USPATFULL  
                  (\*File contains numerically searchable property data)  
 CRN (71413-64-4)



● I<sup>-</sup>

12 REFERENCES IN FILE CA (1907 TO DATE)  
 12 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
 3 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

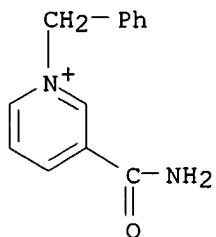
L6 ANSWER 15 OF 45 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 89080-16-0 REGISTRY  
 ED Entered STN: 16 Nov 1984  
 CN 3-Pyridinecarboxamide, 1,4-dihydro-1-(2-phenylethyl)- (9CI) (CA INDEX NAME)  
 FS 3D CONCORD  
 MF C14 H16 N2 O  
 LC STN Files: BEILSTEIN\*, CA, CAPLUS, TOXCENTER, USPATFULL  
 (\*File contains numerically searchable property data)



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

4 REFERENCES IN FILE CA (1907 TO DATE)  
 4 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L6 ANSWER 16 OF 45 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 72306-81-1 REGISTRY  
 ED Entered STN: 16 Nov 1984  
 CN Pyridinium, 3-(aminocarbonyl)-1-(phenylmethyl)-, iodide (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN 1-Benzyl-3-carbamoylpyridinium iodide (6CI, 7CI)  
 MF C13 H13 N2 O . I  
 LC STN Files: BEILSTEIN\*, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, TOXCENTER, USPATFULL  
 (\*File contains numerically searchable property data)  
 CRN (16183-83-8)

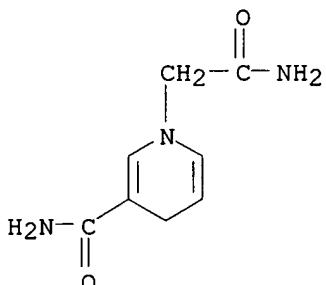


● I<sup>-</sup>

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

5 REFERENCES IN FILE CA (1907 TO DATE)  
 5 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
 2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L6 ANSWER 17 OF 45 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 64881-21-6 REGISTRY  
 ED Entered STN: 16 Nov 1984  
 CN 1(4H)-Pyridineacetamide, 3-(aminocarbonyl)- (9CI) (CA INDEX NAME)  
 OTHER NAMES:  
 CN 1-Carbamoylmethyl-1,4-dihydronicotinamide  
 CN Caricotamide  
 CN EP 0152R  
 FS 3D CONCORD  
 MF C8 H11 N3 O2  
 LC STN Files: BEILSTEIN\*, CA, CAPLUS, TOXCENTER, USPATFULL  
 (\*File contains numerically searchable property data)

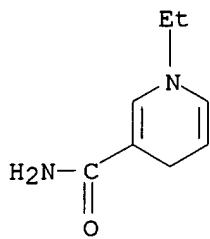


\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

9 REFERENCES IN FILE CA (1907 TO DATE)  
 9 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L6 ANSWER 18 OF 45 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 58880-44-7 REGISTRY  
 ED Entered STN: 16 Nov 1984  
 CN 3-Pyridinecarboxamide, 1-ethyl-1,4-dihydro- (9CI) (CA INDEX NAME)  
 OTHER NAMES:  
 CN N-Ethyl-1,4-dihydronicotinamide  
 FS 3D CONCORD  
 MF C8 H12 N2 O  
 LC STN Files: BEILSTEIN\*, CA, CAPLUS, CASREACT, TOXCENTER, USPATFULL

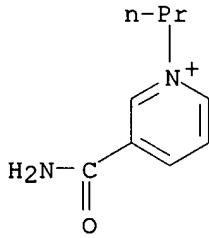
(\*File contains numerically searchable property data)



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

8 REFERENCES IN FILE CA (1907 TO DATE)  
8 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L6 ANSWER 19 OF 45 REGISTRY COPYRIGHT 2006 ACS on STN  
RN 52047-79-7 REGISTRY  
ED Entered STN: 16 Nov 1984  
CN Pyridinium, 3-(aminocarbonyl)-1-propyl-, bromide (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN Pyridinium, 3-carbamoyl-1-propyl-, bromide (6CI)  
OTHER NAMES:  
CN 3-Carbamoyl-1-propylpyridinium bromide  
MF C9 H13 N2 O . Br  
LC STN Files: BEILSTEIN\*, CA, CAOLD, CAPLUS, CHEMCATS, TOXCENTER, USPATFULL  
(\*File contains numerically searchable property data)  
CRN (13309-33-6)

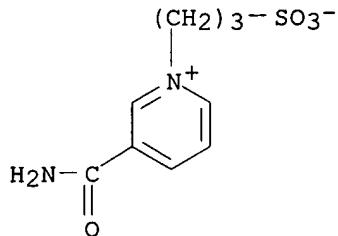


● Br<sup>-</sup>

15 REFERENCES IN FILE CA (1907 TO DATE)  
15 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
4 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L6 ANSWER 20 OF 45 REGISTRY COPYRIGHT 2006 ACS on STN  
RN 51652-08-5 REGISTRY  
ED Entered STN: 16 Nov 1984  
CN Pyridinium, 3-(aminocarbonyl)-1-(3-sulfopropyl)-, inner salt (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN 3-Carbamoyl-1-(3-sulfopropyl)pyridinium hydroxide, inner salt (6CI)  
CN Pyridinium, 3-(aminocarbonyl)-1-(3-sulfopropyl)-, hydroxide, inner salt  
FS 3D CONCORD  
MF C9 H12 N2 O4 S  
LC STN Files: BEILSTEIN\*, CA, CAOLD, CAPLUS, CASREACT, CHEMLIST, MSDS-OHS,

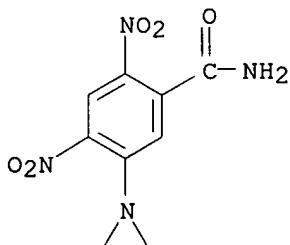
TOXCENTER, USPATFULL  
(\*File contains numerically searchable property data)  
Other Sources: EINECS\*\*  
(\*\*Enter CHEMLIST File for up-to-date regulatory information)



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

11 REFERENCES IN FILE CA (1907 TO DATE)  
11 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L6 ANSWER 21 OF 45 REGISTRY COPYRIGHT 2006 ACS on STN  
RN 21919-05-1 REGISTRY  
ED Entered STN: 16 Nov 1984  
CN Benzamide, 5-(1-aziridinyl)-2,4-dinitro- (8CI, 9CI) (CA INDEX NAME)  
OTHER NAMES:  
CN 2,4-Dinitro-5-ethyleneiminobenzamide  
CN 2,4-Dinitroethyleneiminobenzamide  
CN 5-(1-Aziridinyl)-2,4-dinitrobenzamide  
CN 5-Aziridino-2,4-dinitrobenzamide  
CN 5-Aziridinyl-2,4-dinitrobenzamide  
CN CB 1954  
CN NSC 115829  
CN Tretazicar  
MF C9 H8 N4 O5  
LC STN Files: ADISNEWS, ANABSTR, BEILSTEIN\*, BIOBUSINESS, BIOSIS,  
BIOTECHNO, CA, CANCERLIT, CAPLUS, CASREACT, CHEMCATS, CIN, DDFU, DRUGU,  
EMBASE, IMSDRUGNEWS, IMSRESEARCH, MEDLINE, PROMT, PROUSDDR, RTECS\*,  
TOXCENTER, USPAT2, USPATFULL  
(\*File contains numerically searchable property data)

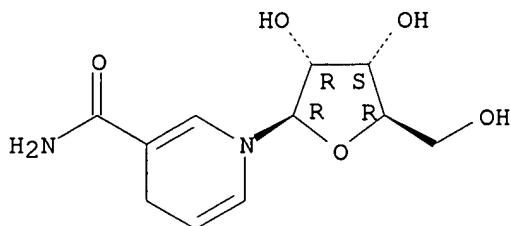


\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

168 REFERENCES IN FILE CA (1907 TO DATE)  
4 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
169 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L6 ANSWER 22 OF 45 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 19132-12-8 REGISTRY  
 ED Entered STN: 16 Nov 1984  
 CN 3-Pyridinecarboxamide, 1,4-dihydro-1- $\beta$ -D-ribofuranosyl- (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN Nicotinamide, 1,4-dihydro-1- $\beta$ -D-ribofuranosyl- (6CI, 7CI, 8CI)  
 OTHER NAMES:  
 CN  $\beta$ -Reduced nicotinamide ribonucleoside  
 CN Reduced nicotinamide riboside  
 FS STEREOSEARCH  
 MF C11 H16 N2 O5  
 CI COM  
 LC STN Files: BEILSTEIN\*, BIOSIS, CA, CAOLD, CAPLUS, TOXCENTER, USPATFULL  
 (\*File contains numerically searchable property data)

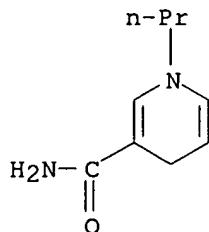
Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

16 REFERENCES IN FILE CA (1907 TO DATE)  
 1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 16 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
 4 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

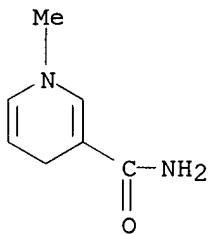
L6 ANSWER 23 OF 45 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 17750-24-2 REGISTRY  
 ED Entered STN: 16 Nov 1984  
 CN 3-Pyridinecarboxamide, 1,4-dihydro-1-propyl- (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN Nicotinamide, 1,4-dihydro-1-propyl- (6CI, 7CI, 8CI)  
 OTHER NAMES:  
 CN 1,4-Dihydro-N1-propylnicotinamide  
 CN 1-n-Propyl-1,4-dihydronicotinamide  
 CN 1-Propyl-1,4-dihydronicotinamide  
 CN N-Propyldihydronicotinamide  
 CN N1-(n-Propyl)-1,4-dihydronicotinamide  
 FS 3D CONCORD  
 MF C9 H14 N2 O  
 LC STN Files: BEILSTEIN\*, BIOSIS, CA, CAOLD, CAPLUS, CASREACT, HODOC\*,  
 TOXCENTER, USPATFULL  
 (\*File contains numerically searchable property data)



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

95 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
95 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
15 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L6 ANSWER 24 OF 45 REGISTRY COPYRIGHT 2006 ACS on STN  
RN 17750-23-1 REGISTRY  
ED Entered STN: 16 Nov 1984  
CN 3-Pyridinecarboxamide, 1,4-dihydro-1-methyl- (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN Nicotinamide, 1,4-dihydro-1-methyl- (6CI, 8CI)  
OTHER NAMES:  
CN 1,4-Dihydro-1-methylnicotinamide  
CN 1,4-Dihydro-N-methylnicotinamide  
CN 1-Methyl-1,4-dihydronicotinamide  
CN 3-Carbamoyl-1,4-dihydro-1-methylpyridine  
CN N-Methyl-1,4-dihydronicotinamide  
FS 3D CONCORD  
MF C7 H10 N2 O  
CI COM  
LC STN Files: BEILSTEIN\*, BIOBUSINESS, BIOSIS, CA, CAOLD, CAPLUS, CASREACT,  
CHEMCATS, IFICDB, IFIPAT, IFIUDB, MEDLINE, TOXCENTER, USPAT2, USPATFULL  
(\*File contains numerically searchable property data)



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSSPTA1642BJF

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

\* \* \* \* \* \* \* \* \* Welcome to STN International \* \* \* \* \* \* \* \* \*

NEWS 1 Web Page URLs for STN Seminar Schedule - N. America  
NEWS 2 "Ask CAS" for self-help around the clock  
NEWS 3 SEP 09 ACD predicted properties enhanced in REGISTRY/ZREGISTRY  
NEWS 4 OCT 03 MATHDI removed from STN  
NEWS 5 OCT 04 CA/CAplus-Canadian Intellectual Property Office (CIPO) added to core patent offices  
NEWS 6 OCT 13 New CAS Information Use Policies Effective October 17, 2005  
NEWS 7 OCT 17 STN(R) AnaVist(TM), Version 1.01, allows the export/download of CAplus documents for use in third-party analysis and visualization tools  
NEWS 8 OCT 27 Free KWIC format extended in full-text databases  
NEWS 9 OCT 27 DIOGENES content streamlined  
NEWS 10 OCT 27 EPFULL enhanced with additional content  
NEWS 11 NOV 14 CA/CAplus - Expanded coverage of German academic research  
NEWS 12 NOV 30 REGISTRY/ZREGISTRY on STN(R) enhanced with experimental spectral property data  
NEWS 13 DEC 05 CASREACT(R) - Over 10 million reactions available  
NEWS 14 DEC 14 2006 MeSH terms loaded in MEDLINE/LMEDLINE  
NEWS 15 DEC 14 2006 MeSH terms loaded for MEDLINE file segment of TOXCENTER  
NEWS 16 DEC 14 CA/CAplus to be enhanced with updated IPC codes  
NEWS 17 DEC 16 MARPATprev will be removed from STN on December 31, 2005  
NEWS 18 DEC 21 IPC search and display fields enhanced in CA/CAplus with the IPC reform  
NEWS 19 DEC 23 New IPC8 SEARCH, DISPLAY, and SELECT fields in USPATFULL/USPAT2  
  
NEWS EXPRESS JANUARY 03 CURRENT VERSION FOR WINDOWS IS V8.01,  
CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),  
AND CURRENT DISCOVER FILE IS DATED 19 DECEMBER 2005.  
V8.0 USERS CAN OBTAIN THE UPGRADE TO V8.01 AT  
<http://download.cas.org/express/v8.0-Discover/>  
  
NEWS DCOST SINCE APPROXIMATELY 20:00 COLUMBUS TIME DECEMBER 29,  
SOME ONLINE COST DISPLAYS HAVE BEEN SHOWING COSTS IN  
2006 PRICES FOR STN COLUMBUS FILES. THIS HAS BEEN  
CORRECTED. PLEASE BE ASSURED THAT YOU WILL BE BILLED  
ACCORDING TO 2005 PRICES UNTIL JAN 1. PLEASE CONTACT  
YOUR LOCAL HELP DESK IF YOU HAVE ANY QUESTIONS. WE  
APOLOGIZE FOR THE ERROR.  
  
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NEWS INTER General Internet Information  
NEWS LOGIN Welcome Banner and News Items  
NEWS PHONE Direct Dial and Telecommunication Network Access to STN  
NEWS WWW CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

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FILE 'HOME' ENTERED AT 16:03:45 ON 03 JAN 2006

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FILE LAST UPDATED: 2 Jan 2006 (20060102/ED)

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<http://www.cas.org/infopolicy.html>

```
=> s us 20030086933/pn  
L1           1 US 20030086933/PN  
              (US2003086933/PN)
```

=> s rn  
20124 RN  
634 RNS  
L2 20735 RN  
          (RN OR RNS)

=> s CB () 1954  
12173 CB  
3804 CBS  
15668 CB  
                  (CB OR CBS)  
8226 1954  
I.3              93 CB (W) 1954

=> s 13 and 12  
I.4 0 I.3 AND I.2

=> file reg COST IN U.S. DOLLARS SINCE FILE TOTAL

FULL ESTIMATED COST	ENTRY 8.72	SESSION 8.93
---------------------	---------------	-----------------

FILE 'REGISTRY' ENTERED AT 16:05:24 ON 03 JAN 2006  
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DICTIONARY FILE UPDATES: 2 JAN 2006 HIGHEST RN 870976-29-7

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conducting SmartSELECT searches.

\*\*\*\*\*  
\*  
\* The CA roles and document type information have been removed from \*  
\* the IDE default display format and the ED field has been added, \*  
\* effective March 20, 2005. A new display format, IDERL, is now \*  
\* available and contains the CA role and document type information. \*  
\*  
\*\*\*\*\*

Structure search iteration limits have been increased. See HELP SLIMITS  
for details.

REGISTRY includes numerically searchable data for experimental and  
predicted properties as well as tags indicating availability of  
experimental property data in the original document. For information  
on property searching in REGISTRY, refer to:

<http://www.cas.org/ONLINE/UG/regprops.html>

=> s 12  
2889 RN  
15 RNS  
L5 2902 RN  
(RN OR RNS)

=> file caplus  
COST IN U.S. DOLLARS SINCE FILE TOTAL  
ENTRY SESSION  
FULL ESTIMATED COST 5.20 14.13

FILE 'CAPLUS' ENTERED AT 16:06:06 ON 03 JAN 2006  
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FILE LAST UPDATED: 2 Jan 2006 (20060102/ED)

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=> d his

(FILE 'HOME' ENTERED AT 16:03:45 ON 03 JAN 2006)

FILE 'CAPLUS' ENTERED AT 16:04:01 ON 03 JAN 2006

L1 1 S US 20030086933/PN  
L2 20735 S RN  
L3 93 S CB () 1954  
L4 0 S L3 AND L2

FILE 'REGISTRY' ENTERED AT 16:05:24 ON 03 JAN 2006

L5 2902 S L2

FILE 'CAPLUS' ENTERED AT 16:06:06 ON 03 JAN 2006

=> sel rn 11  
E1 THROUGH E45 ASSIGNED

=> file reg

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.54	14.67

FILE 'REGISTRY' ENTERED AT 16:06:28 ON 03 JAN 2006  
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STRUCTURE FILE UPDATES: 2 JAN 2006 HIGHEST RN 870976-29-7  
DICTIONARY FILE UPDATES: 2 JAN 2006 HIGHEST RN 870976-29-7

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TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

\*\*\*\*\*  
\*  
\* The CA roles and document type information have been removed from \*  
\* the IDE default display format and the ED field has been added, \*  
\* effective March 20, 2005. A new display format, IDERL, is now \*  
\* available and contains the CA role and document type information. \*  
\*  
\*\*\*\*\*

Structure search iteration limits have been increased. See HELP SLIMITS

for details.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/ONLINE/UG/regprops.html>

=> s el-e45

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    (19132-12-8/RN)  
1 21919-05-1/BI  
    (21919-05-1/RN)  
1 100-39-0/BI  
    (100-39-0/RN)  
1 106-94-5/BI  
    (106-94-5/RN)  
1 106047-77-2/BI  
    (106047-77-2/RN)  
1 107-08-4/BI  
    (107-08-4/RN)  
1 109942-74-7/BI  
    (109942-74-7/RN)  
1 1120-71-4/BI  
    (1120-71-4/RN)  
1 114554-11-9/BI  
    (114554-11-9/RN)  
1 115503-79-2/BI  
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1 119643-82-2/BI  
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1 126298-92-8/BI  
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1 144-48-9/BI  
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1 17376-04-4/BI  
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1 17750-23-1/BI  
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1 218443-93-7/BI  
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1 4229-56-5/BI  
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1 51652-08-5/BI  
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1 52047-79-7/BI  
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1 53-57-6/BI  
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1 5463-59-2/BI
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(5463-59-2/RN)  
1 58-68-4/BI  
(58-68-4/RN)  
1 58880-44-7/BI  
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1 624-76-0/BI  
(624-76-0/RN)  
1 627-18-9/BI  
(627-18-9/RN)  
1 6456-44-6/BI  
(6456-44-6/RN)  
1 64881-21-6/BI  
(64881-21-6/RN)  
1 667919-86-0/BI  
(667919-86-0/RN)  
1 7145-37-1/BI  
(7145-37-1/RN)  
1 72306-81-1/BI  
(72306-81-1/RN)  
1 75-03-6/BI  
(75-03-6/RN)  
1 75-26-3/BI  
(75-26-3/RN)  
1 75-30-9/BI  
(75-30-9/RN)  
1 89080-16-0/BI  
(89080-16-0/RN)  
1 9037-41-6/BI  
(9037-41-6/RN)  
1 952-92-1/BI  
(952-92-1/RN)  
1 97009-81-9/BI  
(97009-81-9/RN)  
1 98-92-0/BI  
(98-92-0/RN)  
1 99362-74-0/BI  
(99362-74-0/RN)

L6 45 (19132-12-8/BI OR 21919-05-1/BI OR 100-39-0/BI OR 106-94-5/BI  
OR 106047-77-2/BI OR 107-08-4/BI OR 109942-74-7/BI OR 1120-71-4/  
BI OR 114554-11-9/BI OR 115503-79-2/BI OR 119643-82-2/BI OR  
126298-92-8/BI OR 141-76-4/BI OR 144-48-9/BI OR 17376-04-4/BI  
OR 17750-23-1/BI OR 17750-24-2/BI OR 218443-88-0/BI OR 218443-90  
-4/BI OR 218443-91-5/BI OR 218443-92-6/BI OR 218443-93-7/BI OR  
4229-56-5/BI OR 51652-08-5/BI OR 52047-79-7/BI OR 53-57-6/BI OR  
5463-59-2/BI OR 58-68-4/BI OR 58880-44-7/BI OR 624-76-0/BI OR  
627-18-9/BI OR 6456-44-6/BI OR 64881-21-6/BI OR 667919-86-0/BI  
OR 7145-37-1/BI OR 72306-81-1/BI OR 75-03-6/BI OR 75-26-3/BI OR  
75-30-9/BI OR 89080-16-0/BI OR 9037-41-6/BI OR 952-92-1/BI OR  
97009-81-9/BI OR 98-92-0/BI OR 99362-74-0/BI)

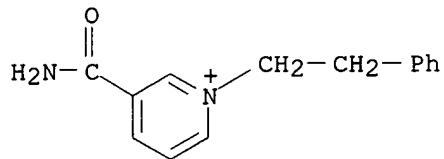
=> d 1-45

L6 ANSWER 1 OF 45 REGISTRY COPYRIGHT 2006 ACS on STN  
RN 667919-86-0 REGISTRY  
ED Entered STN: 26 Mar 2004  
CN Dehydrogenase, reduced nicotinamide riboside (quinone) (9CI) (CA INDEX  
NAME)  
OTHER NAMES:  
CN Dihydronicotinamide riboside quinone oxidoreductase 2  
CN Dihydronicotinamide riboside quinone reductase 2  
CN Dihydronicotinamide riboside:quinone oxidoreductase  
CN NQO2 oxidoreductase  
CN NRH:quinone oxidoreductase

CN Reduced nicotinamide riboside (quinone) dehydrogenase  
MF Unspecified  
CI MAN  
SR CA  
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*  
35 REFERENCES IN FILE CA (1907 TO DATE)  
35 REFERENCES IN FILE CAPLUS (1907 TO DATE)

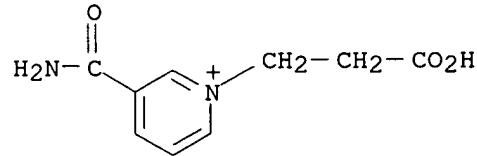
L6 ANSWER 2 OF 45 REGISTRY COPYRIGHT 2006 ACS on STN  
RN 218443-93-7 REGISTRY  
ED Entered STN: 29 Jan 1999  
CN Pyridinium, 3-(aminocarbonyl)-1-(2-phenylethyl)-, iodide (9CI) (CA INDEX  
NAME)  
MF C14 H15 N2 O . I  
SR CA  
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL  
CRN (761385-40-4)



● I<sup>-</sup>

2 REFERENCES IN FILE CA (1907 TO DATE)  
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L6 ANSWER 3 OF 45 REGISTRY COPYRIGHT 2006 ACS on STN  
RN 218443-92-6 REGISTRY  
ED Entered STN: 29 Jan 1999  
CN Pyridinium, 3-(aminocarbonyl)-1-(2-carboxyethyl)-, iodide (9CI) (CA INDEX  
NAME)  
MF C9 H11 N2 O3 . I  
SR CA  
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL  
CRN (717820-87-6)

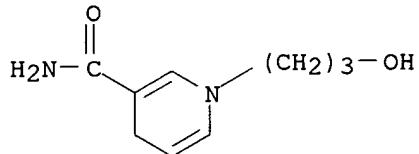


● I<sup>-</sup>

2 REFERENCES IN FILE CA (1907 TO DATE)  
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L6 ANSWER 4 OF 45 REGISTRY COPYRIGHT 2006 ACS on STN

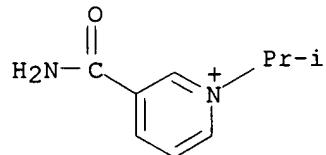
RN 218443-91-5 REGISTRY  
 ED Entered STN: 29 Jan 1999  
 CN 3-Pyridinecarboxamide, 1,4-dihydro-1-(3-hydroxypropyl)- (9CI) (CA INDEX  
 NAME)  
 FS 3D CONCORD  
 MF C9 H14 N2 O2  
 SR CA  
 LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

2 REFERENCES IN FILE CA (1907 TO DATE)  
 2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

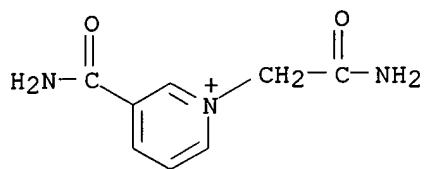
L6 ANSWER 5 OF 45 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 218443-90-4 REGISTRY  
 ED Entered STN: 29 Jan 1999  
 CN Pyridinium, 3-(aminocarbonyl)-1-(1-methylethyl)-, bromide (9CI) (CA INDEX  
 NAME)  
 MF C9 H13 N2 O . Br  
 SR CA  
 LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL  
 CRN (745779-44-6)



● Br<sup>-</sup>

2 REFERENCES IN FILE CA (1907 TO DATE)  
 2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

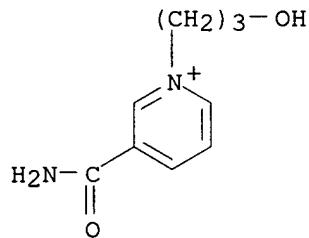
L6 ANSWER 6 OF 45 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 218443-88-0 REGISTRY  
 ED Entered STN: 29 Jan 1999  
 CN Pyridinium, 3-(aminocarbonyl)-1-(2-amino-2-oxoethyl)-, iodide (9CI) (CA  
 INDEX NAME)  
 MF C8 H10 N3 O2 . I  
 SR CA  
 LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL  
 CRN (66822-26-2)



● I<sup>-</sup>

3 REFERENCES IN FILE CA (1907 TO DATE)  
 3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

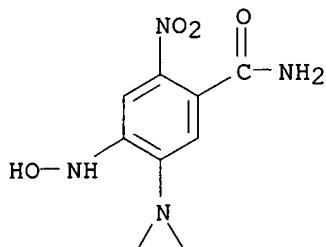
L6 ANSWER 7 OF 45 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 126298-92-8 REGISTRY  
 ED Entered STN: 06 Apr 1990  
 CN Pyridinium, 3-(aminocarbonyl)-1-(3-hydroxypropyl)-, bromide (9CI) (CA INDEX NAME)  
 MF C9 H13 N2 O2 . Br  
 SR CA  
 LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL  
 CRN (83643-85-0)



● Br<sup>-</sup>

4 REFERENCES IN FILE CA (1907 TO DATE)  
 4 REFERENCES IN FILE CAPLUS (1907 TO DATE)

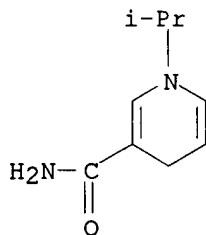
L6 ANSWER 8 OF 45 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 119643-82-2 REGISTRY  
 ED Entered STN: 17 Mar 1989  
 CN Benzamide, 5-(1-aziridinyl)-4-(hydroxyamino)-2-nitro- (9CI) (CA INDEX NAME)  
 FS 3D CONCORD  
 MF C9 H10 N4 O4  
 SR CA  
 LC STN Files: CA, CANCERLIT, CAPLUS, MEDLINE, TOXCENTER, USPATFULL



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

12 REFERENCES IN FILE CA (1907 TO DATE)  
12 REFERENCES IN FILE CAPLUS (1907 TO DATE)

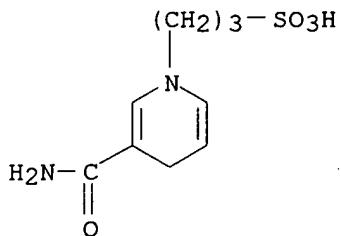
L6 ANSWER 9 OF 45 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 115503-79-2 REGISTRY  
 ED Entered STN: 30 Jul 1988  
 CN 3-Pyridinecarboxamide, 1,4-dihydro-1-(1-methylethyl)- (9CI) (CA INDEX NAME)  
 FS 3D CONCORD  
 MF C9 H14 N2 O  
 SR CA  
 LC STN Files: BEILSTEIN\*, CA, CAPLUS, TOXCENTER, USPATFULL  
 (\*File contains numerically searchable property data)



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

5 REFERENCES IN FILE CA (1907 TO DATE)  
5 REFERENCES IN FILE CAPLUS (1907 TO DATE)

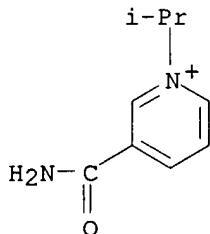
L6 ANSWER 10 OF 45 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 114554-11-9 REGISTRY  
 ED Entered STN: 21 May 1988  
 CN 1(4H)-Pyridinepropanesulfonic acid, 3-(aminocarbonyl)- (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN 1(4H)-Pyridinepropanesulfonic acid, 3-carbamoyl- (6CI)  
 FS 3D CONCORD  
 MF C9 H14 N2 O4 S  
 SR CAOLD  
 LC STN Files: CA, CAOLD, CAPLUS, TOXCENTER, USPATFULL



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

3 REFERENCES IN FILE CA (1907 TO DATE)  
 3 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
 1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

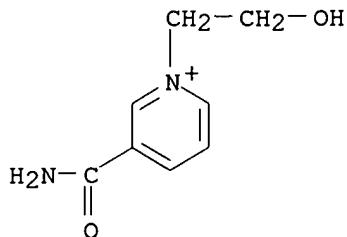
L6 ANSWER 11 OF 45 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 109942-74-7 REGISTRY  
 ED Entered STN: 22 Aug 1987  
 CN Pyridinium, 3-(aminocarbonyl)-1-(1-methylethyl)-, iodide (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN 3-Carbamoyl-1-isopropylpyridinium iodide (6CI)  
 MF C9 H13 N2 O . I  
 SR CAOLD  
 LC STN Files: BEILSTEIN\*, CA, CAOLD, CAPLUS, TOXCENTER, USPATFULL  
     (\*File contains numerically searchable property data)  
 CRN (745779-44-6)



● I<sup>-</sup>

5 REFERENCES IN FILE CA (1907 TO DATE)  
 5 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
 1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

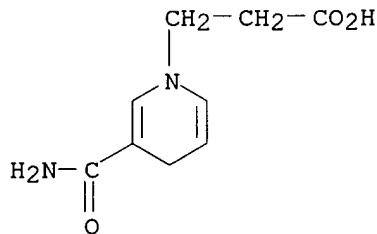
L6 ANSWER 12 OF 45 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 106047-77-2 REGISTRY  
 ED Entered STN: 10 Jan 1987  
 CN Pyridinium, 3-(aminocarbonyl)-1-(2-hydroxyethyl)-, iodide (9CI) (CA INDEX NAME)  
 MF C8 H11 N2 O2 . I  
 SR CA  
 LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL  
 CRN (66822-21-7)



● I<sup>-</sup>

4 REFERENCES IN FILE CA (1907 TO DATE)  
4 REFERENCES IN FILE CAPLUS (1907 TO DATE)

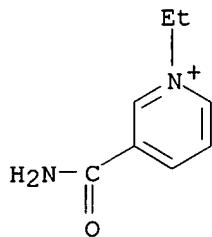
L6 ANSWER 13 OF 45 REGISTRY COPYRIGHT 2006 ACS on STN  
RN 99362-74-0 REGISTRY  
ED Entered STN: 07 Dec 1985  
CN 1(4H)-Pyridinepropanoic acid, 3-(aminocarbonyl)- (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN 1(4H)-Pyridinepropionic acid, 3-carbamoyl- (6CI)  
FS 3D CONCORD  
MF C9 H12 N2 O3  
SR CAOLD  
LC STN Files: CA, CAOLD, CAPLUS, TOXCENTER, USPATFULL



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

3 REFERENCES IN FILE CA (1907 TO DATE)  
3 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

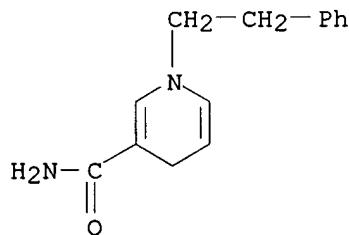
L6 ANSWER 14 OF 45 REGISTRY COPYRIGHT 2006 ACS on STN  
RN 97009-81-9 REGISTRY  
ED Entered STN: 01 Jul 1985  
CN Pyridinium, 3-(aminocarbonyl)-1-ethyl-, iodide (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN 3-Carbamoyl-1-ethylpyridinium iodide (6CI)  
CN Pyridinium, 3-carbamyl-1-ethyl-, iodide (4CI)  
MF C8 H11 N2 O . I  
LC STN Files: BEILSTEIN\*, CA, CAOLD, CAPLUS, TOXCENTER, USPATFULL  
(\*File contains numerically searchable property data)  
CRN (71413-64-4)



● I<sup>-</sup>

12 REFERENCES IN FILE CA (1907 TO DATE)  
 12 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
 3 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

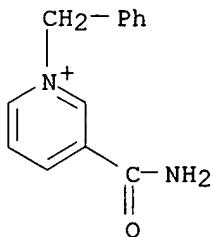
L6 ANSWER 15 OF 45 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 89080-16-0 REGISTRY  
 ED Entered STN: 16 Nov 1984  
 CN 3-Pyridinecarboxamide, 1,4-dihydro-1-(2-phenylethyl)- (9CI) (CA INDEX NAME)  
 FS 3D CONCORD  
 MF C14 H16 N2 O  
 LC STN Files: BEILSTEIN\*, CA, CAPLUS, TOXCENTER, USPATFULL  
 (\*File contains numerically searchable property data)



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

4 REFERENCES IN FILE CA (1907 TO DATE)  
 4 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L6 ANSWER 16 OF 45 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 72306-81-1 REGISTRY  
 ED Entered STN: 16 Nov 1984  
 CN Pyridinium, 3-(aminocarbonyl)-1-(phenylmethyl)-, iodide (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN 1-Benzyl-3-carbamoylpyridinium iodide (6CI, 7CI)  
 MF C13 H13 N2 O . I  
 LC STN Files: BEILSTEIN\*, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, TOXCENTER, USPATFULL  
 (\*File contains numerically searchable property data)  
 CRN (16183-83-8)

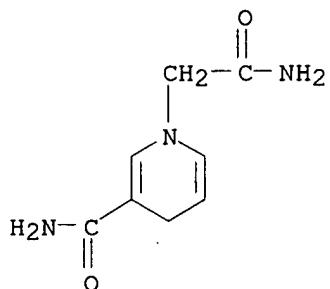


● I<sup>-</sup>

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

5 REFERENCES IN FILE CA (1907 TO DATE)  
 5 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
 2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L6 ANSWER 17 OF 45 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 64881-21-6 REGISTRY  
 ED Entered STN: 16 Nov 1984  
 CN 1(4H)-Pyridineacetamide, 3-(aminocarbonyl)- (9CI) (CA INDEX NAME)  
 OTHER NAMES:  
 CN 1-Carbamoylmethyl-1,4-dihydronicotinamide  
 CN Caricotamide  
 CN EP 0152R  
 FS 3D CONCORD  
 MF C8 H11 N3 O2  
 LC STN Files: BEILSTEIN\*, CA, CAPLUS, TOXCENTER, USPATFULL  
 (\*File contains numerically searchable property data)

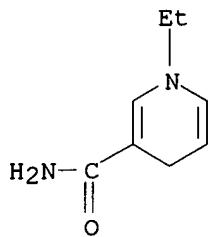


\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

9 REFERENCES IN FILE CA (1907 TO DATE)  
 9 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L6 ANSWER 18 OF 45 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 58880-44-7 REGISTRY  
 ED Entered STN: 16 Nov 1984  
 CN 3-Pyridinecarboxamide, 1-ethyl-1,4-dihydro- (9CI) (CA INDEX NAME)  
 OTHER NAMES:  
 CN N-Ethyl-1,4-dihydronicotinamide  
 FS 3D CONCORD  
 MF C8 H12 N2 O  
 LC STN Files: BEILSTEIN\*, CA, CAPLUS, CASREACT, TOXCENTER, USPATFULL

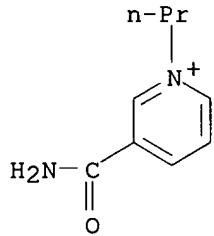
(\*File contains numerically searchable property data)



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

8 REFERENCES IN FILE CA (1907 TO DATE)  
8 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L6 ANSWER 19 OF 45 REGISTRY COPYRIGHT 2006 ACS on STN  
RN 52047-79-7 REGISTRY  
ED Entered STN: 16 Nov 1984  
CN Pyridinium, 3-(aminocarbonyl)-1-propyl-, bromide (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN Pyridinium, 3-carbamoyl-1-propyl-, bromide (6CI)  
OTHER NAMES:  
CN 3-Carbamoyl-1-propylpyridinium bromide  
MF C9 H13 N2 O . Br  
LC STN Files: BEILSTEIN\*, CA, CAOLD, CAPLUS, CHEMCATS, TOXCENTER, USPATFULL  
(\*File contains numerically searchable property data)  
CRN (13309-33-6)

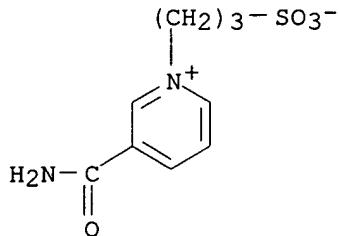


● Br<sup>-</sup>

15 REFERENCES IN FILE CA (1907 TO DATE)  
15 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
4 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L6 ANSWER 20 OF 45 REGISTRY COPYRIGHT 2006 ACS on STN  
RN 51652-08-5 REGISTRY  
ED Entered STN: 16 Nov 1984  
CN Pyridinium, 3-(aminocarbonyl)-1-(3-sulfopropyl)-, inner salt (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN 3-Carbamoyl-1-(3-sulfopropyl)pyridinium hydroxide, inner salt (6CI)  
CN Pyridinium, 3-(aminocarbonyl)-1-(3-sulfopropyl)-, hydroxide, inner salt  
FS 3D CONCORD  
MF C9 H12 N2 O4 S  
LC STN Files: BEILSTEIN\*, CA, CAOLD, CAPLUS, CASREACT, CHEMLIST, MSDS-OHS,

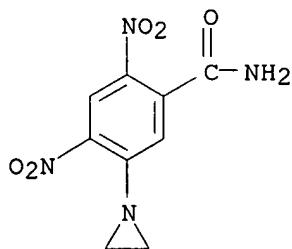
TOXCENTER, USPATFULL  
(\*File contains numerically searchable property data)  
Other Sources: EINECS\*\*  
(\*\*Enter CHEMLIST File for up-to-date regulatory information)



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

11 REFERENCES IN FILE CA (1907 TO DATE)  
11 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L6 ANSWER 21 OF 45 REGISTRY COPYRIGHT 2006 ACS on STN  
RN 21919-05-1 REGISTRY  
ED Entered STN: 16 Nov 1984  
CN Benzamide, 5-(1-aziridinyl)-2,4-dinitro- (8CI, 9CI) (CA INDEX NAME)  
OTHER NAMES:  
CN 2,4-Dinitro-5-ethyleneiminobenzamide  
CN 2,4-Dinitroethyleneiminobenzamide  
CN 5-(1-Aziridinyl)-2,4-dinitrobenzamide  
CN 5-Aziridino-2,4-dinitrobenzamide  
CN 5-Aziridinyl-2,4-dinitrobenzamide  
CN CB 1954  
CN NSC 115829  
CN Tretazicar  
MF C9 H8 N4 O5  
LC STN Files: ADISNEWS, ANABSTR, BEILSTEIN\*, BIOBUSINESS, BIOSIS,  
BIOTECHNO, CA, CANCERLIT, CAPLUS, CASREACT, CHEMCATS, CIN, DDFU, DRUGU,  
EMBASE, IMSDRUGNEWS, IMSRESEARCH, MEDLINE, PROMT, PROUSDDR, RTECS\*,  
TOXCENTER, USPAT2, USPATFULL  
(\*File contains numerically searchable property data)

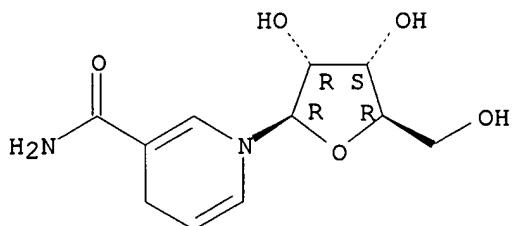


\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

168 REFERENCES IN FILE CA (1907 TO DATE)  
4 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
169 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L6 ANSWER 22 OF 45 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 19132-12-8 REGISTRY  
 ED Entered STN: 16 Nov 1984  
 CN 3-Pyridinecarboxamide, 1,4-dihydro-1- $\beta$ -D-ribofuranosyl- (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN Nicotinamide, 1,4-dihydro-1- $\beta$ -D-ribofuranosyl- (6CI, 7CI, 8CI)  
 OTHER NAMES:  
 CN  $\beta$ -Reduced nicotinamide ribonucleoside  
 CN Reduced nicotinamide riboside  
 FS STEREOSEARCH  
 MF C11 H16 N2 O5  
 CI COM  
 LC STN Files: BEILSTEIN\*, BIOSIS, CA, CAOLD, CAPLUS, TOXCENTER, USPATFULL  
 (\*File contains numerically searchable property data)

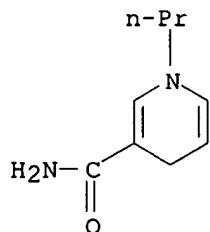
Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

16 REFERENCES IN FILE CA (1907 TO DATE)  
 1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 16 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
 4 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L6 ANSWER 23 OF 45 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 17750-24-2 REGISTRY  
 ED Entered STN: 16 Nov 1984  
 CN 3-Pyridinecarboxamide, 1,4-dihydro-1-propyl- (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN Nicotinamide, 1,4-dihydro-1-propyl- (6CI, 7CI, 8CI)  
 OTHER NAMES:  
 CN 1,4-Dihydro-N1-propylnicotinamide  
 CN 1-n-Propyl-1,4-dihydronicotinamide  
 CN 1-Propyl-1,4-dihydronicotinamide  
 CN N-Propyldihydronicotinamide  
 CN N1-(n-Propyl)-1,4-dihydronicotinamide  
 FS 3D CONCORD  
 MF C9 H14 N2 O  
 LC STN Files: BEILSTEIN\*, BIOSIS, CA, CAOLD, CAPLUS, CASREACT, HODOC\*,  
 TOXCENTER, USPATFULL  
 (\*File contains numerically searchable property data)



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

95 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
95 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
15 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L6 ANSWER 24 OF 45 REGISTRY COPYRIGHT 2006 ACS on STN

RN 17750-23-1 REGISTRY

ED Entered STN: 16 Nov 1984

CN 3-Pyridinecarboxamide, 1,4-dihydro-1-methyl- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Nicotinamide, 1,4-dihydro-1-methyl- (6CI, 8CI)

OTHER NAMES:

CN 1,4-Dihydro-1-methylnicotinamide

CN 1,4-Dihydro-N-methylnicotinamide

CN 1-Methyl-1,4-dihydronicotinamide

CN 3-Carbamoyl-1,4-dihydro-1-methylpyridine

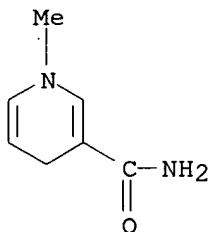
CN N-Methyl-1,4-dihydronicotinamide

FS 3D CONCORD

MF C7 H10 N2 O

CI COM

LC STN Files: BEILSTEIN\*, BIOBUSINESS, BIOSIS, CA, CAOLD, CAPLUS, CASREACT,  
CHEMCATS, IFICDB, IFIPAT, IFIUDB, MEDLINE, TOXCENTER, USPAT2, USPATFULL  
(\*File contains numerically searchable property data)



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

107 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
107 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
3 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L6 ANSWER 25 OF 45 REGISTRY COPYRIGHT 2006 ACS on STN

RN 17376-04-4 REGISTRY

ED Entered STN: 16 Nov 1984

CN Benzene, (2-iodoethyl)- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

OTHER NAMES:

CN (2-Iodoethyl)benzene

CN  $\beta$ -Phenethyl iodide

CN  $\beta$ -Phenylethyl iodide

CN 1-Iodo-2-phenylethane

CN 2-Phenylethyl iodide

CN Phenethyl iodide

FS 3D CONCORD

MF C8 H9 I

CI COM

LC STN Files: BEILSTEIN\*, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS,  
CHEMINFORMRX, CHEMLIST, CSCHEM, DETHERM\*, GMELIN\*, HODOC\*, SPECINFO,  
TOXCENTER, USPAT2, USPATFULL

(\*File contains numerically searchable property data)  
Other Sources: NDSL\*\*, TSCA\*\*  
(\*\*Enter CHEMLIST File for up-to-date regulatory information)

ICH<sub>2</sub>-CH<sub>2</sub>-Ph

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

268 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
268 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
15 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

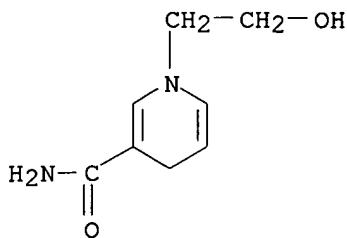
L6 ANSWER 26 OF 45 REGISTRY COPYRIGHT 2006 ACS on STN  
RN 9037-41-6 REGISTRY  
ED Entered STN: 16 Nov 1984  
CN Reductase, nitro- (9CI) (CA INDEX NAME)  
OTHER NAMES:  
CN 2,4,6-Trinitrotoluene nitroreductase  
CN 3-Nitrophenol reductase  
CN 4-Nitrobiphenyl reductase  
CN Aromatic nitroreductase  
CN Dinitropyrene nitroreductase  
CN Nitrobenzene nitroreductase  
CN Nitrobenzene reductase  
CN Nitrobenzoic acid reductase  
CN Nitrophenol reductase  
CN Nitroreductase  
CN Nitroreductase (NADH)  
CN PETN reductase  
CN TNT nitroreductase  
MF Unspecified  
CI MAN  
LC STN Files: ADISNEWS, AGRICOLA, BIOBUSINESS, BIOSIS, BIOTECHNO, CA,  
CAPLUS, CEN, CIN, EMBASE, PIRA, PROMT, TOXCENTER, USPAT2, USPATFULL

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

663 REFERENCES IN FILE CA (1907 TO DATE)  
11 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
666 REFERENCES IN FILE CAPLUS (1907 TO DATE)

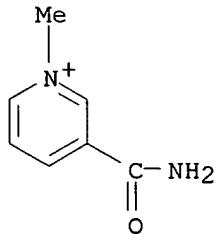
L6 ANSWER 27 OF 45 REGISTRY COPYRIGHT 2006 ACS on STN  
RN 7145-37-1 REGISTRY  
ED Entered STN: 16 Nov 1984  
CN 3-Pyridinecarboxamide, 1,4-dihydro-1-(2-hydroxyethyl)- (9CI) (CA INDEX  
NAME)  
OTHER CA INDEX NAMES:  
CN Nicotinamide, 1,4-dihydro-1-(2-hydroxyethyl)- (7CI, 8CI)  
OTHER NAMES:  
CN NSC 74259  
FS 3D CONCORD  
MF C8 H12 N2 O2  
LC STN Files: BEILSTEIN\*, CA, CAOLD, CAPLUS, TOXCENTER, USPATFULL  
(\*File contains numerically searchable property data)



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

6 REFERENCES IN FILE CA (1907 TO DATE)  
 6 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
 1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L6 ANSWER 28 OF 45 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 6456-44-6 REGISTRY  
 ED Entered STN: 16 Nov 1984  
 CN Pyridinium, 3-(aminocarbonyl)-1-methyl-, iodide (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN 3-Carbamoyl-1-methylpyridinium iodide (6CI, 7CI)  
 CN Pyridinium, 3-carbamoyl-1-methyl-, iodide (8CI)  
 CN Pyridinium, 3-carbamyl-1-methyl-, iodide (4CI)  
 OTHER NAMES:  
 CN 1-Methylnicotinamide iodide  
 CN Nicotinamide methiodide  
 MF C7 H9 N2 O . I  
 SR CAS EARLY REGISTRATIONS  
 LC STN Files: BEILSTEIN\*, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMLIST,  
     CSCHEM, GMELIN\*, RTECS\*, TOXCENTER, USPAT2, USPATFULL  
     (\*File contains numerically searchable property data)  
 Other Sources: EINECS\*\*  
     (\*\*Enter CHEMLIST File for up-to-date regulatory information)  
 CRN (3106-60-3)



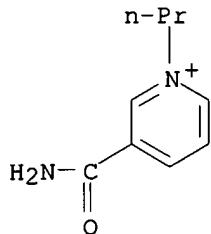
● I<sup>-</sup>

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

104 REFERENCES IN FILE CA (1907 TO DATE)  
 104 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
 19 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L6 ANSWER 29 OF 45 REGISTRY COPYRIGHT 2006 ACS on STN

RN 5463-59-2 REGISTRY  
 ED Entered STN: 16 Nov 1984  
 CN Pyridinium, 3-(aminocarbonyl)-1-propyl-, iodide (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN 3-Carbamoyl-1-propylpyridinium iodide (6CI, 7CI)  
 CN Pyridinium, 3-carbamoyl-1-propyl-, iodide (8CI)  
 MF C9 H13 N2 O . I  
 LC STN Files: BEILSTEIN\*, CA, CAOLD, CAPLUS, HODOC\*, TOXCENTER, USPATFULL  
     (\*File contains numerically searchable property data)  
 CRN (13309-33-6)

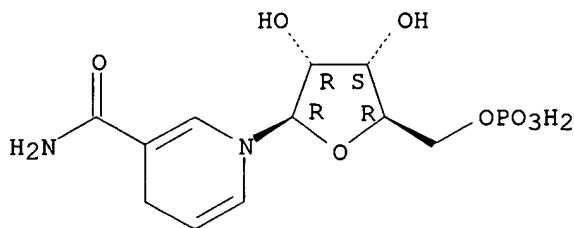


● I<sup>-</sup>

18 REFERENCES IN FILE CA (1907 TO DATE)  
 18 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
 4 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L6 ANSWER 30 OF 45 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 4229-56-5 REGISTRY  
 ED Entered STN: 16 Nov 1984  
 CN 3-Pyridinecarboxamide, 1,4-dihydro-1-(5-O-phosphono-β-D-ribofuranosyl-) (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN Nicotinamide, 1,4-dihydro-1-β-D-ribofuranosyl-, 5'-(dihydrogen phosphate) (8CI)  
 CN Nicotinamide, 1,4-dihydro-1-β-D-ribofuranosyl-, 5'-phosphate (7CI)  
 OTHER NAMES:  
 CN β-NMNH  
 CN 1,4-Dihydroneicotinamide mononucleotide  
 CN 1,4-Dihydroneicotinamide ribonucleotide  
 CN Nicotinamide ribonucleotide, reduced  
 CN NMNH  
 CN NMNH2  
 CN Reduced nicotinamide mononucleotide  
 CN Reduced nicotinamide ribonucleotide  
 FS STEREOSEARCH  
 MF C11 H17 N2 O8 P  
 CI COM  
 LC STN Files: AGRICOLA, BEILSTEIN\*, CA, CAOLD, CAPLUS, CEN, TOXCENTER, USPATFULL  
     (\*File contains numerically searchable property data)

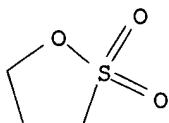
Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

77 REFERENCES IN FILE CA (1907 TO DATE)  
 1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 77 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
 4 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

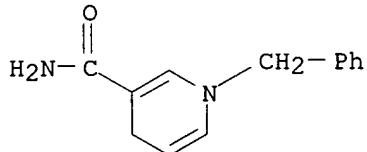
L6 ANSWER 31 OF 45 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 1120-71-4 REGISTRY  
 ED Entered STN: 16 Nov 1984  
 CN 1,2-Oxathiolane, 2,2-dioxide (8CI, 9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN 1-Propanesulfonic acid, 3-hydroxy-,  $\gamma$ -sultone (6CI)  
 OTHER NAMES:  
 CN  $\gamma$ -Propane sultone  
 CN 1,3-Propane sultone  
 CN 1,3-Trimethylene sultone  
 CN 3-Hydroxy-1-propanesulfonic acid  $\gamma$ -sultone  
 CN 3-Hydroxy-1-propanesulfonic acid sultone  
 CN NSC 42386  
 CN Propane sultone  
 CN Propyl sultone  
 FS 3D CONCORD  
 MF C3 H6 O3 S  
 CI COM  
 LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN\*, BIOBUSINESS, BIOSIS,  
 BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CEN, CHEMCATS,  
 CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB, DETHERM\*, EMBASE,  
 ENCOMPPAT, ENCOMPPAT2, GMELIN\*, HODOC\*, HSDB\*, IFICDB, IFIPAT, IFIUDB,  
 MEDLINE, MSDS-OHS, NIOSHTIC, PROMT, PS, RTECS\*, SPECINFO, TOXCENTER,  
 ULIDAT, USPAT2, USPATFULL  
 (\*File contains numerically searchable property data)  
 Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*  
 (\*\*Enter CHEMLIST File for up-to-date regulatory information)



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1720 REFERENCES IN FILE CA (1907 TO DATE)  
 374 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 1723 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
 31 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L6 ANSWER 32 OF 45 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 952-92-1 REGISTRY  
 ED Entered STN: 16 Nov 1984  
 CN 3-Pyridinecarboxamide, 1,4-dihydro-1-(phenylmethyl)- (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN Nicotinamide, 1-benzyl-1,4-dihydro- (6CI, 7CI, 8CI)  
 OTHER NAMES:  
 CN 1,4-Dihydro-1-(phenylmethyl)-3-pyridinecarboxamide  
 CN 1,4-Dihydro-N-benzylnicotinamide  
 CN 1-Benzyl-1,4-dihydronicotinamide  
 CN 1-Benzyl-3-carbamido-1,4-dihdropyridine  
 CN 1-Benzyl-3-carbamoyl-1,4-dihdropyridine  
 CN BNAH  
 CN N-Benzyl-1,4-dihydronicotinamide  
 CN N-Benzyl-3-carbamoyl-1,4-dihdropyridine  
 CN N-Benzylidihydronicotinamide  
 CN NSC 26899  
 FS 3D CONCORD  
 DR 174307-50-7, 84062-23-7  
 MF C13 H14 N2 O  
 CI COM  
 LC STN Files: AGRICOLA, BEILSTEIN\*, BIOSIS, CA, CAOLD, CAPLUS, CASREACT,  
     CHEMCATS, CHEMINFORMRX, CSCHM, GMELIN\*, IFICDB, IFIPAT, IFIUDB,  
     MEDLINE, PIRA, PROMT, TOXCENTER, USPATFULL  
     (\*File contains numerically searchable property data)



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

582 REFERENCES IN FILE CA (1907 TO DATE)  
 10 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 582 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
 31 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L6 ANSWER 33 OF 45 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 627-18-9 REGISTRY  
 ED Entered STN: 16 Nov 1984  
 CN 1-Propanol, 3-bromo- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)  
 OTHER NAMES:  
 CN 1-Bromo-3-hydroxypropane  
 CN 1-Bromo-3-propanol  
 CN 3-Bromo-1-propanol  
 CN 3-Bromopropyl alcohol  
 CN 3-Hydroxypropyl bromide  
 CN Trimethylene bromohydrin  
 FS 3D CONCORD  
 MF C3 H7 Br O  
 CI COM  
 LC STN Files: BEILSTEIN\*, BIOSIS, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS,  
     CHEMINFORMRX, CHEMLIST, CSCHM, EMBASE, GMELIN\*, HODOC\*, IFICDB, IFIPAT,

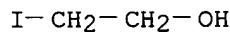
IFIUDB, NIOSHTIC, PS, RTECS\*, SPECINFO, SYNTHLINE, TOXCENTER, USPAT2,  
USPATFULL  
(\*File contains numerically searchable property data)  
Other Sources: EINECS\*\*, NDSL\*\*, TSCA\*\*  
(\*\*Enter CHEMLIST File for up-to-date regulatory information)



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1358 REFERENCES IN FILE CA (1907 TO DATE)  
17 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
1358 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
8 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L6 ANSWER 34 OF 45 REGISTRY COPYRIGHT 2006 ACS on STN  
RN **624-76-0** REGISTRY  
ED Entered STN: 16 Nov 1984  
CN Ethanol, 2-iodo- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)  
OTHER NAMES:  
CN 2-Iodoethanol  
CN Ethylene iodohydrin  
CN Iodoethanol  
CN NSC 85227  
FS 3D CONCORD  
MF C2 H5 I O  
CI COM  
LC STN Files: BEILSTEIN\*, BIOSIS, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS,  
CHEMINFORMRX, CHEMLIST, CSCHEM, DETHERM\*, HODOC\*, IFICDB, IFIPAT,  
IFIUDB, NIOSHTIC, RTECS\*, SPECINFO, SYNTHLINE, TOXCENTER, USPAT2,  
USPATFULL  
(\*File contains numerically searchable property data)  
Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*  
(\*\*Enter CHEMLIST File for up-to-date regulatory information)

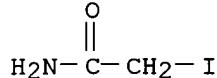


\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

457 REFERENCES IN FILE CA (1907 TO DATE)  
6 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
457 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
7 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L6 ANSWER 35 OF 45 REGISTRY COPYRIGHT 2006 ACS on STN  
RN **144-48-9** REGISTRY  
ED Entered STN: 16 Nov 1984  
CN Acetamide, 2-iodo- (8CI, 9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN Acetamide, iodo- (6CI)  
OTHER NAMES:  
CN α-Iodoacetamide  
CN 2-Iodoacetamide  
CN Iodoacetamide  
CN Monoiodoacetamide  
CN NSC 9581  
CN Surauto

FS 3D CONCORD  
 MF C2 H4 I N O  
 CI COM  
 LC STN Files: AGRICOLA, AQUIRE, BEILSTEIN\*, BIOBUSINESS, BIOSIS, BIOTECHNO,  
     CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMINFORMRX,  
     CHEMLIST, CSCHEM, DDFU, DRUGU, EMBASE, HODOC\*, IFICDB, IFIPAT, IFIUDB,  
     IPA, MEDLINE, MSDS-OHS, NAPRALERT, NIOSHTIC, PIRA, PROMT, RTECS\*,  
     SCISEARCH, SYNTHLINE, TOXCENTER, USPAT2, USPATFULL, VETU  
     (\*File contains numerically searchable property data)  
 Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*  
     (\*\*Enter CHEMLIST File for up-to-date regulatory information)



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1630 REFERENCES IN FILE CA (1907 TO DATE)  
 45 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 1631 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
 80 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L6 ANSWER 36 OF 45 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 141-76-4 REGISTRY  
 ED Entered STN: 16 Nov 1984  
 CN Propanoic acid, 3-iodo- (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN Propionic acid, 3-iodo- (6CI, 7CI, 8CI)  
 OTHER NAMES:  
 CN  $\beta$ -Iodopropionic acid  
 CN 3-Iodopropanoic acid  
 CN 3-Iodopropionic acid  
 CN NSC 2124  
 FS 3D CONCORD  
 MF C3 H5 I O2  
 CI COM  
 LC STN Files: ANABSTR, BEILSTEIN\*, BIOBUSINESS, BIOSIS, CA, CAOLD, CAPLUS,  
     CASREACT, CHEMCATS, CHEMINFORMRX, CHEMLIST, CSCHEM, GMELIN\*, HODOC\*,  
     MSDS-OHS, NIOSHTIC, RTECS\*, SPECINFO, TOXCENTER, USPAT2, USPATFULL  
     (\*File contains numerically searchable property data)  
 Other Sources: EINECS\*\*, NDSSL\*\*, TSCA\*\*  
     (\*\*Enter CHEMLIST File for up-to-date regulatory information)



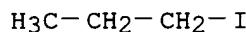
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

180 REFERENCES IN FILE CA (1907 TO DATE)  
 2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 180 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
 17 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L6 ANSWER 37 OF 45 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 107-08-4 REGISTRY  
 ED Entered STN: 16 Nov 1984  
 CN Propane, 1-iodo- (8CI, 9CI) (CA INDEX NAME)

OTHER NAMES:

CN 1-Iodopropane  
CN n-Propyl iodide  
CN Propane iodide  
CN Propyl iodide  
FS 3D CONCORD  
MF C3 H7 I  
CI COM  
LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN\*, BIOBUSINESS, BIOSIS,  
BIOTECHNO, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMINFORMRX,  
CHEMLIST, CHEMSAFE, CSCHEM, DETHERM\*, DIPPR\*, EMBASE, GMELIN\*, HODOC\*,  
IFICDB, IFIPAT, IFIUDB, MRCK\*, MSDS-OHS, NAPRALERT, NIOSHTIC, PIRA,  
PROMT, PS, RTECS\*, SPECINFO, SYNTHLINE, TOXCENTER, TULSA, USPAT2,  
USPATFULL, VTB  
(\*File contains numerically searchable property data)  
Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*  
(\*\*Enter CHEMLIST File for up-to-date regulatory information)



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

3145 REFERENCES IN FILE CA (1907 TO DATE)  
13 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
3153 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
5 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L6 ANSWER 38 OF 45 REGISTRY COPYRIGHT 2006 ACS on STN

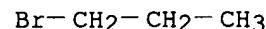
RN 106-94-5 REGISTRY

ED Entered STN: 16 Nov 1984

CN Propane, 1-bromo- (8CI, 9CI) (CA INDEX NAME)

OTHER NAMES:

CN 1-Bromopropane  
CN 1-Propyl bromide  
CN Ascusol MC  
CN Leksol  
CN n-Propyl bromide  
CN Propyl bromide  
FS 3D CONCORD  
MF C3 H7 Br  
CI COM  
LC STN Files: AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN\*, BIOBUSINESS, BIOSIS,  
BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS,  
CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB, DETHERM\*, DIPPR\*,  
EMBASE, GMELIN\*, HODOC\*, HSDB\*, IFICDB, IFIUDB, IPA, MEDLINE,  
MRCK\*, MSDS-OHS, NAPRALERT, NIOSHTIC, PIRA, PROMT, PS, RTECS\*,  
SCISEARCH, SPECINFO, SYNTHLINE, TOXCENTER, USPAT2, USPATFULL, VTB  
(\*File contains numerically searchable property data)  
Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*  
(\*\*Enter CHEMLIST File for up-to-date regulatory information)



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

4152 REFERENCES IN FILE CA (1907 TO DATE)  
46 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

4158 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
5 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L6 ANSWER 39 OF 45 REGISTRY COPYRIGHT 2006 ACS on STN  
RN 100-39-0 REGISTRY  
ED Entered STN: 16 Nov 1984  
CN Benzene, (bromomethyl)- (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN Toluene,  $\alpha$ -bromo- (8CI)  
OTHER NAMES:  
CN (Bromomethyl)benzene  
CN (Bromophenyl)methane  
CN  $\alpha$ -Bromotoluene  
CN  $\omega$ -Bromotoluene  
CN Benzyl bromide  
CN NSC 8041  
CN Phenylmethyl bromide  
FS 3D CONCORD  
MF C7 H7 Br  
CI COM  
LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN\*, BIOBUSINESS, BIOSIS,  
BIOTECHNO, CA, CAOLD, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMINFORMRX,  
CHEMLIST, CIN, CSCHEM, DETHERM\*, EMBASE, GMELIN\*, HODOC\*, HSDB\*, IFICDB,  
IFIPAT, IFIUDB, MEDLINE, MRCK\*, NIOSHTIC, PDLCOM\*, PIRA, PROMT, PS,  
RTECS\*, SPECINFO, SYNTHLINE, TOXCENTER, ULIDAT, USPAT2, USPATFULL  
(\*File contains numerically searchable property data)  
Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*  
(\*\*Enter CHEMLIST File for up-to-date regulatory information)

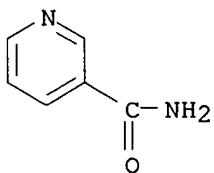
Ph—CH<sub>2</sub>—Br

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

13497 REFERENCES IN FILE CA (1907 TO DATE)  
101 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
13535 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
6 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L6 ANSWER 40 OF 45 REGISTRY COPYRIGHT 2006 ACS on STN  
RN 98-92-0 REGISTRY  
ED Entered STN: 16 Nov 1984  
CN 3-Pyridinecarboxamide (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN Nicotinamide (8CI)  
OTHER NAMES:  
CN  $\beta$ -Pyridinecarboxamide  
CN 3-(Aminocarbonyl)pyridine  
CN 3-Amidopyridine  
CN 3-Carbamoylpyridine  
CN 3-Pyridinecarboxylic acid amide  
CN Aminicotin  
CN Benicot  
CN Delonin Amide  
CN Dipegyl  
CN m-(Aminocarbonyl)pyridine  
CN NAM  
CN Niacinamide  
CN Niavit PP  
CN Nicamina  
CN Nicamindon

CN Nicasir  
 CN Nicobion  
 CN Nicofort  
 CN Nicosan 2  
 CN Nicosylamide  
 CN Nicotilamide  
 CN Nicotine acid amide  
 CN Nicotinic acid amide  
 CN Nicotinic amide  
 CN Nicotylamide  
 CN Nicovit  
 CN Nicovitina  
 CN Nictoamide  
 CN Niocinamide  
 CN Niozymin  
 CN NSC 13128  
 CN NSC 27452  
 CN Papulex  
 CN Pelmin  
 CN Pelmine  
 CN Pelonin amide  
 CN Vi-Nicotyl  
 CN Vitamin B  
 CN Vitamin B3  
 FS 3D CONCORD  
 DR 123574-63-0, 37321-14-5, 78731-47-2  
 MF C6 H6 N2 O  
 CI COM  
 LC STN Files: ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN\*,  
     BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS,  
     CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM,  
     CSNB, DDFU, DETHERM\*, DIOGENES, DRUGU, EMBASE, GMELIN\*, HODOC\*, HSDB\*,  
     IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK\*, MSDS-OHS, NAPRALERT,  
     NIOSHTIC, PDLCOM\*, PHAR, PIRA, PROMT, PROUSDDR, PS, RTECS\*, SPECINFO,  
     TOXCENTER, USAN, USPAT2, USPATFULL, VTB  
     (\*File contains numerically searchable property data)  
 Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*, WHO  
     (\*\*Enter CHEMLIST File for up-to-date regulatory information)

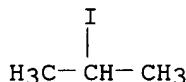


\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

9025 REFERENCES IN FILE CA (1907 TO DATE)  
 402 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 9036 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
 9 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L6 ANSWER 41 OF 45 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 75-30-9 REGISTRY  
 ED Entered STN: 16 Nov 1984  
 CN Propane, 2-iodo- (8CI, 9CI) (CA INDEX NAME)  
 OTHER NAMES:  
 CN 1-Methylethyl iodide  
 CN 2-Iodopropane

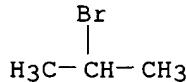
CN 2-Propyl iodide  
 CN Isopropyl iodide  
 CN sec-Propyl iodide  
 FS 3D CONCORD  
 MF C3 H7 I  
 CI COM  
 LC STN Files: ANABSTR, BEILSTEIN\*, BIOBUSINESS, BIOSIS, CA, CAOLD, CAPLUS,  
     CASREACT, CHEMCATS, CHEMINFORMRX, CHEMLIST, CHEMSAFE, CSCHEM, DETHERM\*,  
     DIPPR\*, GMELIN\*, HODOC\*, IFICDB, IFIPAT, IFIUDB, MEDLINE, MRCK\*,  
     MSDS-OHS, PS, RTECS\*, SPECINFO, SYNTHLINE, TOXCENTER, USPAT2, USPATFULL  
     (\*File contains numerically searchable property data)  
 Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*  
     (\*\*Enter CHEMLIST File for up-to-date regulatory information)



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

2866 REFERENCES IN FILE CA (1907 TO DATE)  
 7 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 2877 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
 4 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

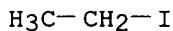
L6 ANSWER 42 OF 45 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 75-26-3 REGISTRY  
 ED Entered STN: 16 Nov 1984  
 CN Propane, 2-bromo- (8CI, 9CI) (CA INDEX NAME)  
 OTHER NAMES:  
 CN 2-Bromopropane  
 CN Isopropyl bromide  
 CN sec-Propyl bromide  
 FS 3D CONCORD  
 MF C3 H7 Br  
 CI COM  
 LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN\*, BIOBUSINESS, BIOSIS,  
     BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CHEMCATS,  
     CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB, DETHERM\*, DIPPR\*,  
     EMBASE, GMELIN\*, HODOC\*, HSDB\*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE,  
     MRCK\*, MSDS-OHS, NIOSHTIC, PROMT, PS, RTECS\*, SPECINFO, SYNTHLINE,  
     TOXCENTER, ULIDAT, USPAT2, USPATFULL  
     (\*File contains numerically searchable property data)  
 Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*  
     (\*\*Enter CHEMLIST File for up-to-date regulatory information)



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

3333 REFERENCES IN FILE CA (1907 TO DATE)  
 15 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 3340 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
 1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L6 ANSWER 43 OF 45 REGISTRY COPYRIGHT 2006 ACS on STN  
RN 75-03-6 REGISTRY  
ED Entered STN: 16 Nov 1984  
CN Ethane, iodo- (8CI, 9CI) (CA INDEX NAME)  
OTHER NAMES:  
CN Ethyl iodide  
CN Hydriodic ether  
CN Iodoethane  
CN Monoiodoethane  
CN NSC 8825  
FS 3D CONCORD  
MF C2 H5 I  
CI COM  
LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN\*, BIOBUSINESS, BIOSIS,  
BIOTECHNO, CA, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS,  
CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, CSNB, DETHERM\*, DIPPR\*, EMBASE,  
ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, GMELIN\*, HODOC\*, IFICDB,  
IFIPAT, IFIUDB, MEDLINE, MRCK\*, MSDS-OHS, NAPRALERT, NIOSHTIC, PIRA,  
PROMT, PS, RTECS\*, SPECINFO, TOXCENTER, USPAT2, USPATFULL, VTB  
(\*File contains numerically searchable property data)  
Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*  
(\*\*Enter CHEMLIST File for up-to-date regulatory information)



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

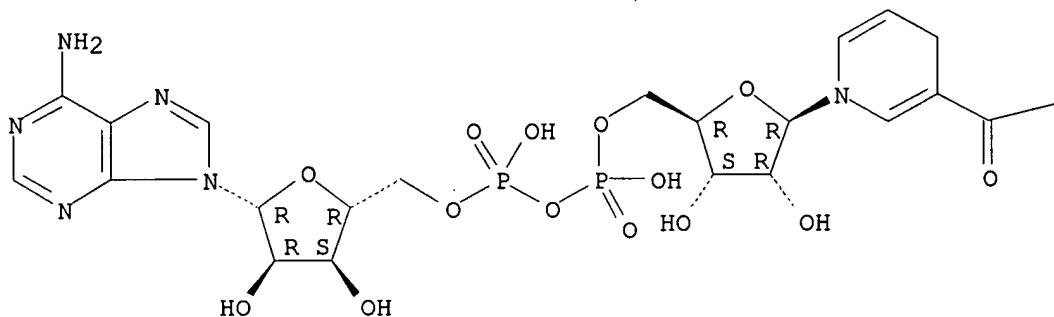
6769 REFERENCES IN FILE CA (1907 TO DATE)  
73 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
6781 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
6 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L6 ANSWER 44 OF 45 REGISTRY COPYRIGHT 2006 ACS on STN  
RN 58-68-4 REGISTRY  
ED Entered STN: 16 Nov 1984  
CN Adenosine 5'-(trihydrogen diphosphate), P'→5'-ester with  
1,4-dihydro-1-β-D-ribofuranosyl-3-pyridinecarboxamide (9CI) (CA  
INDEX NAME)  
OTHER CA INDEX NAMES:  
CN Adenosine 5'-(trihydrogen pyrophosphate), 5'→5'-ester with  
1,4-dihydro-1-β-D-ribofuranosylnicotinamide (8CI)  
CN Adenosine pyrophosphate, 5'→5'-ester with 1,4-dihydro-1-β-D-  
ribofuranosylnicotinamide (7CI)  
OTHER NAMES:  
CN β-DPNH  
CN β-NADH  
CN 1,4-Dihydronicotinamide adenine dinucleotide  
CN Codehydroxylase I, reduced  
CN Codehydrogenase I, reduced  
CN Coenzyme I, reduced  
CN Cozymase I, reduced  
CN Dihydrocodehydrogenase I  
CN Dihydrocozymase  
CN Dihydronicotinamide adenine dinucleotide  
CN Dihydronicotinamide mononucleotide  
CN DPNH  
CN ENADA  
CN NADH  
CN NADH2  
CN Nicotinamide-adenine dinucleotide, reduced

CN Reduced codehydrogenase I  
 CN Reduced diphosphopyridine nucleotide  
 CN Reduced nicotinamide adenine diphosphate  
 CN Reduced nicotinamide-adenine dinucleotide  
 FS STEREOSEARCH  
 DR 443892-10-2  
 MF C21 H29 N7 O14 P2  
 CI COM  
 LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN\*, BIOBUSINESS, BIOSIS,  
     BIOTECHNO, CA, CABA, CAOLD, CAPLUS, CASREACT, CEN, CHEMCATS, CHEMLIST,  
     CIN, CSCHEM, DDFU, DRUGU, EMBASE, GMELIN\*, IFICDB, IFIPAT, IFIUDB,  
     MRCK\*, NIOSHTIC, PROMT, TOXCENTER, USPAT2, USPATFULL  
     (\*File contains numerically searchable property data)  
 Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*  
     (\*\*Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

—NH2

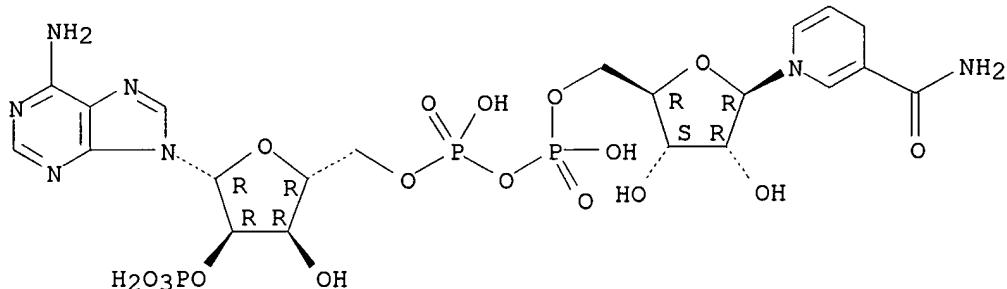
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

13555 REFERENCES IN FILE CA (1907 TO DATE)  
 263 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 13563 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
 1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L6 ANSWER 45 OF 45 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 53-57-6 REGISTRY  
 ED Entered STN: 16 Nov 1984  
 CN Adenosine 5'-(trihydrogen diphosphate), 2'-(dihydrogen phosphate),  
     P'→5'-ester with 1,4-dihydro-1-β-D-ribofuranosyl-3-  
     pyridinecarboxamide (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN Adenosine, 2'-(dihydrogen phosphate) 5'-(trihydrogen pyrophosphate),  
     5'→5'-ester with 1,4-dihydro-1-β-D-ribofuranosylnicotinamide  
     (8CI)  
 OTHER NAMES:  
 CN β-NADPH  
 CN β-Nicotinamide-adenine-dinucleotide-phosphoric acid  
 CN β-TPNH

CN 51: PN: WO2004076659 FIGURE: 7 claimed sequence  
 CN Codehydrase II, reduced  
 CN Codehydrogenase II, reduced  
 CN Coenzyme II, reduced  
 CN Cozymase II, reduced  
 CN Dihydrocodehydrogenase II  
 CN NADPH  
 CN NADPH2  
 CN Nicotinamide-adenine dinucleotide phosphate, reduced  
 CN Reduced codehydrogenase II  
 CN Reduced nicotinamide adenine dinucleotide phosphate  
 CN Reduced triphosphopyridine nucleotide  
 CN TPNH  
 CN Triphosphopyridine nucleotide, reduced  
 FS STEREOSEARCH  
 DR 22046-90-8, 3545-01-5  
 MF C21 H30 N7 O17 P3  
 CI COM  
 LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN\*, BIOBUSINESS, BIOSIS,  
     BIOTECHNO, CA, CABA, CAOLD, CAPLUS, CASREACT, CEN, CHEMCATS, CHEMLIST,  
     CIN, CSCHEM, DDFU, DRUGU, EMBASE, IFICDB, IFIPAT, IFIUDB, IPA, MRCK\*,  
     NIOSHTIC, PROMT, TOXCENTER, USPAT2, USPATFULL  
     (\*File contains numerically searchable property data)  
 Other Sources: EINECS\*\*, NDSL\*\*, TSCA\*\*  
     (\*\*Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

11178 REFERENCES IN FILE CA (1907 TO DATE)  
 231 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 11189 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
 57 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> file caplus	SINCE FILE	TOTAL
COST IN U.S. DOLLARS	ENTRY	SESSION
FULL ESTIMATED COST	87.70	102.37

FILE 'CAPLUS' ENTERED AT 16:09:35 ON 03 JAN 2006  
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FILE LAST UPDATED: 2 Jan 2006 (20060102/ED)

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(FILE 'HOME' ENTERED AT 16:03:45 ON 03 JAN 2006)

FILE 'CAPLUS' ENTERED AT 16:04:01 ON 03 JAN 2006

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L2 20735 S RN  
L3 93 S CB () 1954  
L4 0 S L3 AND L2

FILE 'REGISTRY' ENTERED AT 16:05:24 ON 03 JAN 2006

L5 2902 S L2

FILE 'CAPLUS' ENTERED AT 16:06:06 ON 03 JAN 2006  
SEL RN L1

FILE 'REGISTRY' ENTERED AT 16:06:28 ON 03 JAN 2006  
L6 45 S E1-E45

FILE 'CAPLUS' ENTERED AT 16:09:35 ON 03 JAN 2006

=> s 16  
L7 62737 L6

=> s 17 and 13  
L8 87 L7 AND L3

=> s 17 (L) 13  
L9 65 L7 (L) L3

=> s NQo2  
L10 73 NQO2

=> s 110 and 19  
L11 5 L10 AND L9

=> d ibib 1-5

L11 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2004:301733 CAPLUS  
DOCUMENT NUMBER: 141:306746  
TITLE: Quinone reductase-mediated nitro-reduction: clinical applications  
AUTHOR(S): Knox, Richard J.; Chen, Shiuan  
CORPORATE SOURCE: Enact Pharma PLC, Salisbury, SP4 0JQ, UK  
SOURCE: Methods in Enzymology (2004), 382(Quinones and Quinone Enzymes, Part B), 194-221  
CODEN: MENZAU; ISSN: 0076-6879

PUBLISHER: Elsevier  
DOCUMENT TYPE: Journal; General Review  
LANGUAGE: English  
REFERENCE COUNT: 92 THERE ARE 92 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2003:749515 CAPLUS  
DOCUMENT NUMBER: 140:121861  
TITLE: CB 1954: From the Walker tumor to **NQO2** and VDEPT  
AUTHOR(S): Knox, Richard J.; Burke, Philip J.; Chen, Shiuan; Kerr, David J.  
CORPORATE SOURCE: Enact Pharma PLC, Salisbury, UK  
SOURCE: Current Pharmaceutical Design (2003), 9(26), 2091-2104  
CODEN: CPDEFP; ISSN: 1381-6128  
PUBLISHER: Bentham Science Publishers Ltd.  
DOCUMENT TYPE: Journal; General Review  
LANGUAGE: English  
REFERENCE COUNT: 97 THERE ARE 97 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2002:835107 CAPLUS  
DOCUMENT NUMBER: 139:414  
TITLE: Improved cancer treatment with enzyme technology  
CORPORATE SOURCE: Enact Pharma, Enact Pharma plc, Salisbury, SP4 0JQ, UK  
SOURCE: sp2 (2002), 1(8), 22, 24-25  
CODEN: SPSUCF; ISSN: 1476-184X  
PUBLISHER: Avakado Ltd.  
DOCUMENT TYPE: Journal  
LANGUAGE: English

L11 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2000:597759 CAPLUS  
DOCUMENT NUMBER: 133:275962  
TITLE: Bioactivation of 5-(aziridin-1-yl)-2,4-dinitrobenzamide (CB 1954) by human NAD(P)H quinone oxidoreductase 2: a novel co-substrate-mediated antitumor prodrug therapy  
AUTHOR(S): Knox, Richard J.; Jenkins, Terence C.; Hobbs, Stephen M.; Chen, Shiuan; Melton, Roger G.; Burke, Philip J.  
CORPORATE SOURCE: Enact Pharma Plc, Salisbury, SP4 0JQ, UK  
SOURCE: Cancer Research (2000), 60(15), 4179-4186  
CODEN: CNREA8; ISSN: 0008-5472  
PUBLISHER: American Association for Cancer Research  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
REFERENCE COUNT: 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 1999:9725 CAPLUS  
DOCUMENT NUMBER: 130:76160  
TITLE: NAD(P)H:quinone reductase 2- and prodrug-based therapeutic systems  
INVENTOR(S): Burke, Philip John; Knox, Richard John  
PATENT ASSIGNEE(S): Enzacta R & D Limited, UK  
SOURCE: PCT Int. Appl., 109 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9857662	A2	19981223	WO 1998-GB1731	19980615
WO 9857662	A3	19990812		
W: CA, GB, JP, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
CA 2292608	AA	19981223	CA 1998-2292608	19980615
GB 2341605	A1	20000322	GB 1999-28237	19980615
GB 2341605	B2	20020220		
EP 988059	A2	20000329	EP 1998-929555	19980615
EP 988059	B1	20051207		
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GB 2365338	A1	20020220	GB 2001-26082	19980615
GB 2365338	B2	20020403		
JP 2002511754	T2	20020416	JP 1999-503953	19980615
EP 1468698	A2	20041020	EP 2004-76964	19980615
EP 1468698	A3	20050323		
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US 6867231	B1	20050315	US 2000-445865	20000211
HK 1023069	A1	20021011	HK 2000-102240	20000413
HK 1041824	A1	20021115	HK 2002-103701	20000413
US 2003086933	A1	20030508	US 2002-99830	20020313
PRIORITY APPLN. INFO.:			GB 1997-12370	A 19970614
			EP 1998-929555	A3 19980615
			GB 1999-28237	A3 19980615
			WO 1998-GB1731	W 19980615
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FILE 'CAPLUS' ENTERED AT 16:04:01 ON 03 JAN 2006

L1 1 S US 20030086933/PN  
 L2 20735 S RN  
 L3 93 S CB () 1954  
 L4 0 S L3 AND L2

FILE 'REGISTRY' ENTERED AT 16:05:24 ON 03 JAN 2006

L5 2902 S L2

FILE 'CAPLUS' ENTERED AT 16:06:06 ON 03 JAN 2006  
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FILE 'REGISTRY' ENTERED AT 16:06:28 ON 03 JAN 2006  
 L6 45 S E1-E45

FILE 'CAPLUS' ENTERED AT 16:09:35 ON 03 JAN 2006  
 L7 62737 S L6  
 L8 87 S L7 AND L3  
 L9 65 S L7 (L) L3  
 L10 73 S NQO2  
 L11 5 S L10 AND L9

=> s NQO1

L12 505 NQO1

=> s 112 and 19  
L13 3 L12 AND L9

=> d ibib 1-3

L13 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2004:301733 CAPLUS  
DOCUMENT NUMBER: 141:306746  
TITLE: Quinone reductase-mediated nitro-reduction: clinical applications  
AUTHOR(S): Knox, Richard J.; Chen, Shiuan  
CORPORATE SOURCE: Enact Pharma PLC, Salisbury, SP4 0JQ, UK  
SOURCE: Methods in Enzymology (2004), 382(Quinones and Quinone Enzymes, Part B), 194-221  
CODEN: MENZAU; ISSN: 0076-6879  
PUBLISHER: Elsevier  
DOCUMENT TYPE: Journal; General Review  
LANGUAGE: English  
REFERENCE COUNT: 92 THERE ARE 92 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2003:749515 CAPLUS  
DOCUMENT NUMBER: 140:121861  
TITLE: CB 1954: From the Walker tumor to NQO2 and VDEPT  
AUTHOR(S): Knox, Richard J.; Burke, Philip J.; Chen, Shiuan; Kerr, David J.  
CORPORATE SOURCE: Enact Pharma PLC, Salisbury, UK  
SOURCE: Current Pharmaceutical Design (2003), 9(26), 2091-2104  
CODEN: CPDEFF; ISSN: 1381-6128  
PUBLISHER: Bentham Science Publishers Ltd.  
DOCUMENT TYPE: Journal; General Review  
LANGUAGE: English  
REFERENCE COUNT: 97 THERE ARE 97 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2000:597759 CAPLUS  
DOCUMENT NUMBER: 133:275962  
TITLE: Bioactivation of 5-(aziridin-1-yl)-2,4-dinitrobenzamide (CB 1954) by human NAD(P)H quinone oxidoreductase 2: a novel co-substrate-mediated antitumor prodrug therapy  
AUTHOR(S): Knox, Richard J.; Jenkins, Terence C.; Hobbs, Stephen M.; Chen, Shiuan; Melton, Roger G.; Burke, Philip J.  
CORPORATE SOURCE: Enact Pharma Plc, Salisbury, SP4 0JQ, UK  
SOURCE: Cancer Research (2000), 60(15), 4179-4186  
CODEN: CNREA8; ISSN: 0008-5472  
PUBLISHER: American Association for Cancer Research  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
REFERENCE COUNT: 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> s DT () diaphorase  
34025 DT  
558 DTS  
34532 DT  
(DT OR DTS)  
6506 DIAPHORASE  
629 DIAPHORASES  
6719 DIAPHORASE

(DIAPHORASE OR DIAPHORASES)

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=> s 114 and 19  
L15 21 L14 AND L9 .

=> s 115 not py>1997  
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L16 14 L15 NOT PY>1997

=> s 116 not py>1996  
8617286 PY>1996  
L17 13 L16 NOT PY>1996

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L17 ANSWER 1 OF 13 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 1995:794027 CAPLUS  
DOCUMENT NUMBER: 123:275328  
TITLE: Bioactivation of dinitrobenzamide mustards by an E.  
coli B nitroreductase  
AUTHOR(S): Anlezark, G. M.; Melton, R. G.; Sherwood, R. F.;  
Wilson, W. R.; Denny, W. A.; Palmer, B. D.; Knox, R.  
J.; Friedlos, F.; Williams, A.  
CORPORATE SOURCE: Cent. Appl. Microbiol. Res., Porton  
Down/Salisbury/Wilts., SP4 0JG, UK  
SOURCE: Biochemical Pharmacology (1995), 50(5), 609-18  
CODEN: BCPCA6; ISSN: 0006-2952  
PUBLISHER: Elsevier  
DOCUMENT TYPE: Journal  
LANGUAGE: English

L17 ANSWER 2 OF 13 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 1995:569763 CAPLUS  
DOCUMENT NUMBER: 123:106083  
TITLE: Catalytic properties of NAD(P)H:quinone acceptor  
oxidoreductase: study involving mouse, rat, human, and  
mouse-rat chimeric enzymes  
AUTHOR(S): Chen, Shiuian; Knox, Richard; Lewis, Alexander D.;  
Friedlos, Frank; Workman, Paul; Deng, Paulis S. K.;  
Fung, Maisie; Ebenstein, Donna; Wu, Kebin; Tsai,  
Ta-Ming  
CORPORATE SOURCE: Div. Immunol., Beckman Res. Inst. City Hope, Duarte,  
CA, 91010, USA  
SOURCE: Molecular Pharmacology (1995), 47(5), 934-9  
CODEN: MOPMA3; ISSN: 0026-895X  
PUBLISHER: Williams & Wilkins  
DOCUMENT TYPE: Journal  
LANGUAGE: English

L17 ANSWER 3 OF 13 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 1994:44858 CAPLUS  
DOCUMENT NUMBER: 120:44858  
TITLE: The bioactivation of CB 1954 and its use as a prodrug  
in antibody-directed enzyme prodrug therapy (ADEPT)  
AUTHOR(S): Knox, Richard J.; Friedlos, Frank; Boland, Marion P.  
CORPORATE SOURCE: Sec. Drug Dev., Inst. Cancer Res., Sutton/Surrey, SM2  
5NG, UK  
SOURCE: Cancer and Metastasis Reviews (1993), 12(2), 195-212  
CODEN: CMRED4; ISSN: 0167-7659  
DOCUMENT TYPE: Journal; General Review  
LANGUAGE: English

L17 ANSWER 4 OF 13 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 1993:73228 CAPLUS  
DOCUMENT NUMBER: 118:73228  
TITLE: Potentiation of CB 1954 cytotoxicity by reduced pyridine nucleotides in human tumor cells by stimulation of **DT diaphorase** activity  
AUTHOR(S): Friedlos, Frank; Biggs, Patrick J.; Abrahamson, Julie A.; Knox, Richard J.  
CORPORATE SOURCE: Sect. Drug Dev., Inst. Cancer Res., Sutton/Surrey, SM2 5NG, UK  
SOURCE: Biochemical Pharmacology (1992), 44(9), 1739-43  
DOCUMENT TYPE: Journal  
LANGUAGE: English

L17 ANSWER 5 OF 13 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 1992:598410 CAPLUS  
DOCUMENT NUMBER: 117:198410  
TITLE: Metabolism of NAD(P)H by blood components. Relevance to bioreductively activated prodrugs in a targeted enzyme therapy system  
AUTHOR(S): Friedlos, Frank; Knox, Richard J.  
CORPORATE SOURCE: Sect. Drug Dev., Inst. Cancer Res., Sutton/Surrey, SM2 5NG, UK  
SOURCE: Biochemical Pharmacology (1992), 44(4), 631-5  
DOCUMENT TYPE: Journal  
LANGUAGE: English

=> d kwic 2

L17 ANSWER 2 OF 13 CAPLUS COPYRIGHT 2006 ACS on STN  
AB NAD(P)H:quinone acceptor oxidoreductase (quinone reductase) (**DT-diaphorase**, EC 1.6.99.2) is involved in the process of reductive activation of cytotoxic antitumor quinones and nitrobenzenes. This study initially examined. . .  
IT 21919-05-1, CB 1954 114560-48-4, E09  
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)  
(catalytic properties of NAD(P)H:quinone acceptor oxidoreductase: study involving mouse, rat, human, and mouse-rat chimeric enzymes)

=> s 21919-05-1/rn  
169 21919-05-1  
5 21919-05-1D  
L18 167 21919-05-1/RN  
(21919-05-1 (NOTL) 21919-05-1D )

=> d his

(FILE 'HOME' ENTERED AT 16:03:45 ON 03 JAN 2006)

FILE 'CAPLUS' ENTERED AT 16:04:01 ON 03 JAN 2006  
L1 1 S US 20030086933/PN  
L2 20735 S RN  
L3 93 S CB () 1954  
L4 0 S L3 AND L2

FILE 'REGISTRY' ENTERED AT 16:05:24 ON 03 JAN 2006  
L5 2902 S L2

FILE 'CAPLUS' ENTERED AT 16:06:06 ON 03 JAN 2006  
SEL RN L1

FILE 'REGISTRY' ENTERED AT 16:06:28 ON 03 JAN 2006  
L6 45 S E1-E45

FILE 'CAPLUS' ENTERED AT 16:09:35 ON 03 JAN 2006  
L7 62737 S L6  
L8 87 S L7 AND L3  
L9 65 S L7 (L) L3  
L10 73 S NQ02  
L11 5 S L10 AND L9  
L12 505 S NQ01  
L13 3 S L12 AND L9  
L14 1030 S DT () DIAPHORASE  
L15 21 S L14 AND L9  
L16 14 S L15 NOT PY>1997  
L17 13 S L16 NOT PY>1996  
L18 167 S 21919-05-1/RN

=> d kwic 4

L18 ANSWER 4 OF 167 CAPLUS COPYRIGHT 2006 ACS on STN  
IT 51-21-8, 5-FU **21919-05-1**, CB1954 23214-92-8, Doxorubicin  
33069-62-4, Paclitaxel 123948-87-8, Topotecan  
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL  
(Biological study); USES (Uses)  
(inhibition of NF- $\kappa$ B enhances the cytotoxicity of virus-directed  
enzyme prodrug therapy and oncolytic adenovirus cancer gene therapy)

=> d ibib 6-10

L18 ANSWER 6 OF 167 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2005:465003 CAPLUS  
DOCUMENT NUMBER: 143:159026  
TITLE: Nitroarylmethylcarbamate prodrugs of doxorubicin for  
use with nitroreductase gene-directed enzyme prodrug  
therapy  
AUTHOR(S): Hay, Michael P.; Wilson, William R.; Denny, William A.  
CORPORATE SOURCE: Auckland Cancer Society Research Centre, Faculty of  
Medical and Health Sciences, The University of  
Auckland, Auckland, 92019, N. Z.  
SOURCE: Bioorganic & Medicinal Chemistry (2005), 13(12),  
4043-4055  
CODEN: BMECEP; ISSN: 0968-0896  
PUBLISHER: Elsevier Ltd.  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
REFERENCE COUNT: 58 THERE ARE 58 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 7 OF 167 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2004:1050014 CAPLUS  
DOCUMENT NUMBER: 142:253968  
TITLE: The gene suicide system NTR/CB1954 causes ablation of  
differentiated 3T3L1 adipocytes by apoptosis  
AUTHOR(S): Felmer, Ricardo N.; Clark, John A.  
CORPORATE SOURCE: Department of Gene Expression and Development, Roslin  
Institute, Roslin, Midlothian, EH25 9PS, UK  
SOURCE: Biological Research (2004), 37(3), 449-460  
CODEN: BESEEB; ISSN: 0716-9760

PUBLISHER: Society of Biology of Chile  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 REFERENCE COUNT: 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 8 OF 167 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2004:1040532 CAPLUS  
 DOCUMENT NUMBER: 142:253408  
 TITLE: Nitroreductase: A prodrug-activating enzyme for cancer gene therapy  
 AUTHOR(S): Searle, Peter F.; Chen, Ming-Jen; Hu, Longqin; Race, Paul R.; Lovering, Andrew L.; Grove, Jane I.; Guise, Chris; Jaberipour, Mansooreh; James, Nicholas D.; Mautner, Vivien; Young, Lawrence S.; Kerr, David J.; Mountain, Andrew; White, Scott A.; Hyde, Eva I.  
 CORPORATE SOURCE: Cancer Research UK Institute for Cancer Studies, University of Birmingham, Edgbaston, UK  
 SOURCE: Clinical and Experimental Pharmacology and Physiology (2004), 31(11), 811-816  
 CODEN: CEXPB9; ISSN: 0305-1870  
 PUBLISHER: Blackwell Publishing Asia Pty Ltd.  
 DOCUMENT TYPE: Journal; General Review  
 LANGUAGE: English  
 REFERENCE COUNT: 45 THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 9 OF 167 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2004:965067 CAPLUS  
 DOCUMENT NUMBER: 141:406039  
 TITLE: Combinations for the treatment of diseases involving cell proliferation, migration or apoptosis of myeloma cells, or angiogenesis  
 INVENTOR(S): Hilberg, Frank; Solca, Flavio; Stefanic, Martin Friedrich; Baum, Anke; Munzert, Gerd; Van Meel, Jacobus C. A.  
 PATENT ASSIGNEE(S): Boehringer Ingelheim International G.m.b.H., Germany; Boehringer Ingelheim Pharma G.m.b.H. & Co. K.-G.  
 SOURCE: PCT Int. Appl., 101 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004096224	A2	20041111	WO 2004-EP4363	20040424
WO 2004096224	A3	20041216		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1473043	A1	20041103	EP 2003-9587	20030429
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				

PRIORITY APPLN. INFO.:	EP 2003-9587	A 20030429
	EP 2004-508	A 20040113
	EP 2004-1171	A 20040121
L18 ANSWER 10 OF 167 ACCESSION NUMBER: DOCUMENT NUMBER: TITLE: AUTHOR(S): CORPORATE SOURCE: SOURCE: PUBLISHER: DOCUMENT TYPE: LANGUAGE: REFERENCE COUNT:	CAPLUS COPYRIGHT 2006 ACS on STN 2004:941577 CAPLUS 142:253791 Virus-directed enzyme prodrug therapy: intratumoral administration of a replication-deficient adenovirus encoding nitroreductase to patients with resectable liver cancer Palmer, Daniel H.; Mautner, Vivien; Mirza, Darius; Oliff, Simon; Gerritsen, Winald; van der Sijp, Joost R. M.; Hubscher, Stefan; Reynolds, Gary; Bonney, Sarah; Rajaratnam, Ratna; Hull, Diana; Horne, Mark; Ellis, John; Mountain, Andrew; Hill, Simon; Harris, Peter A.; Searle, Peter F.; Young, Lawrence S.; James, Nicholas D.; Kerr, David J. Cancer Research UK Institute for Cancer Studies, Department of Pathology and Liver Research Laboratories, University of Birmingham, Edgbaston, Birmingham, UK Journal of Clinical Oncology (2004), 22(9), 1546-1552 CODEN: JCONDN; ISSN: 0732-183X American Society of Clinical Oncology Journal English 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT	

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(FILE 'HOME' ENTERED AT 16:03:45 ON 03 JAN 2006)

FILE 'CAPLUS' ENTERED AT 16:04:01 ON 03 JAN 2006

L1 1 S US 20030086933/PN  
 L2 20735 S RN  
 L3 93 S CB () 1954  
 L4 0 S L3 AND L2

FILE 'REGISTRY' ENTERED AT 16:05:24 ON 03 JAN 2006

L5 2902 S L2

FILE 'CAPLUS' ENTERED AT 16:06:06 ON 03 JAN 2006  
 SEL RN L1

FILE 'REGISTRY' ENTERED AT 16:06:28 ON 03 JAN 2006  
 L6 45 S E1-E45

FILE 'CAPLUS' ENTERED AT 16:09:35 ON 03 JAN 2006

L7 62737 S L6  
 L8 87 S L7 AND L3  
 L9 65 S L7 (L) L3  
 L10 73 S NQO2  
 L11 5 S L10 AND L9  
 L12 505 S NQO1  
 L13 3 S L12 AND L9  
 L14 1030 S DT () DIAPHORASE  
 L15 21 S L14 AND L9  
 L16 14 S L15 NOT PY>1997  
 L17 13 S L16 NOT PY>1996  
 L18 167 S 21919-05-1/RN

=> d 117 ibib kwic 4

L17 ANSWER 4 OF 13 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 1993:73228 CAPLUS  
DOCUMENT NUMBER: 118:73228  
TITLE: Potentiation of CB 1954 cytotoxicity by reduced pyridine nucleotides in human tumor cells by stimulation of **DT diaphorase** activity  
AUTHOR(S): Friedlos, Frank; Biggs, Patrick J.; Abrahamson, Julie A.; Knox, Richard J.  
CORPORATE SOURCE: Sect. Drug Dev., Inst. Cancer Res., Sutton/Surrey, SM2 5NG, UK  
SOURCE: Biochemical Pharmacology (1992), 44(9), 1739-43  
CODEN: BCPCA6; ISSN: 0006-2952  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
TI Potentiation of CB 1954 cytotoxicity by reduced pyridine nucleotides in human tumor cells by stimulation of **DT diaphorase** activity  
AB The toxicity of CB 1954 [5-(aziridin-1-yl)-2,4-dinitrobenzamide] towards human cells was greatly enhanced by NADH (when fetal calf serum was present in the culture medium) and by nicotinamide riboside (reduced NRH), but not by nicotinate riboside (reduced). Co-treatment of human cells with CB 1954 and NADH resulted in the formation of crosslinks in their DNA. The toxicity produced by other DNA crosslinking agents was unaffected by reduced nicotinamide compds. When caffeine was included in the medium, a reduction in the cytotoxicity of CB 1954 occurred. The toxicity experienced by human cell lines after exposure to CB 1954 and NADH was proportional to their levels of the enzyme **DT diaphorase** [NAD(P)H dehydrogenase (quinone), (EC 1.6.99.2.)]. It is concluded that NRH, which the authors have shown to be a co-factor for rat **DT diaphorase** (Friedlos et al., Biochem Pharmacol 44; 25-31, 1992), is generated from NADH by enzymes in fetal calf serum, and stimulates the activity of human **DT diaphorase** towards CB 1954.  
ST CB 1954 cytotoxicity reduced pyridine nucleotide; **DT diaphorase** CB 1954 cytotoxicity NADH  
IT 58-68-4, NADH 110-86-1D, Pyridine, reduced nucleotides 1341-23-7 17720-18-2  
RL: BIOL (Biological study)  
(cytotoxicity of **CB 1954** potentiation by,  
**DT diaphorase** stimulation in, in human cells)  
IT 21919-05-1, CB 1954  
RL: PRP (Properties)  
(cytotoxicity of, reduced pyridine nucleotides enhancement of,  
**DT diaphorase** stimulation in, in human cells)

=> d 117 kwic 1-13

L17 ANSWER 1 OF 13 CAPLUS COPYRIGHT 2006 ACS on STN  
AB . . . terms of ADEPT, SN 23862 has a potential advantage over CB 1954 in that it is not reduced by mammalian **DT diaphorases**. Therefore, a series of compds. related to SN 23862 has been synthesized, and evaluated as potential prodrugs both by determination. . . cytotoxicity in presence of enzyme and cofactor were not substrates for the enzyme. None of the analogs were activated by **DT diaphorase** isolated from Walter 256 carcinoma cells. For those compds. which were substrates for the E. coli nitroreductase, there was a. . .  
IT 50-07-7, Mitomycin C 443-48-1, Metronidazole 4533-39-5, Nitracrine 13551-87-6, Misonidazole 20063-73-4, Nitracrine N-oxide

**21919-05-1, CB 1954** 27314-97-2, Tirapazamine  
55743-71-0, SN 23163 136990-96-0, SN 24771 142439-52-9, SN 23428  
142439-53-0, SN 23759 142439-56-3, SN 23849 142439-57-4, SN 23777  
142439-61-0, SN 23862 142439-62-1, SN 23856 142439-63-2, SN 23816  
150271-87-7, SN 24927 150271-88-8, SN 24928 150271-89-9, SN 24926  
150271-91-3, SN 24939 150271-92-4, SN 24935 150271-93-5, SN 25015  
150271-94-6, SN 24971 150271-95-7, SN 25066 150271-96-8, SN 25079  
150271-98-0, SN 25263 150271-99-1, SN 25260 150272-00-7, SN 25261  
150272-01-8, SN 25313 150272-02-9, SN 25084 150272-03-0, SN 25188  
150503-17-6, SN 25246 156423-03-9, SN 25293 169527-43-9, SN 25402  
169527-44-0, SN 25507  
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)  
(bioactivation of dinitrobenzamide mustards by *E. coli* B nitroreductase)

- L17 ANSWER 2 OF 13 CAPLUS COPYRIGHT 2006 ACS on STN  
AB NAD(P)H:quinone acceptor oxidoreductase (quinone reductase) (**DT-diaphorase**, EC 1.6.99.2) is involved in the process of reductive activation of cytotoxic antitumor quinones and nitrobenzenes. This study initially examined. . .  
IT **21919-05-1, CB 1954** 114560-48-4, EO9  
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)  
(catalytic properties of NAD(P)H:quinone acceptor oxidoreductase: study involving mouse, rat, human, and mouse-rat chimeric enzymes)
- L17 ANSWER 3 OF 13 CAPLUS COPYRIGHT 2006 ACS on STN  
AB . . . in insensitive cells. Crosslink formation is due to the aerobic reduction of CB 1954 to form 5-(aziridin-1-yl)-4-hydroxylamino-2-nitrobenzamide by the enzyme **DT diaphorase**. The 4-hydroxylamine can not crosslink DNA directly but requires further activation by a non-enzymic reaction with a thioester (such as acetylene CoA). As predicted from their measured **DT diaphorase** activities, a number of rat hepatoma and hepatocyte cell lines are also sensitive to CB 1954. However, no CB 1954-sensitive. . . human origin have been found. This is because the rate of reduction of CB 1954 by the human form of **DT diaphorase** is much lower than that of the Walker enzyme (ratio of Kcat = 6.4). To overcome this intrinsic resistance of. . . (ADEPT). A nitroreductase enzyme has been isolated from *E. coli* that can bioactivate CB 1954 much more rapidly than Walker **DT diaphorase** and is very suitable for ADEPT. Thus CB 1954 may have a role in the therapy of human tumors.  
IT **21919-05-1, CB 1954**  
RL: BIOL (Biological study)  
(bioactivation of and use in antibody-directed enzyme prodrug therapy)
- L17 ANSWER 4 OF 13 CAPLUS COPYRIGHT 2006 ACS on STN  
TI Potentiation of CB 1954 cytotoxicity by reduced pyridine nucleotides in human tumor cells by stimulation of **DT diaphorase** activity  
AB . . . experienced by human cell lines after exposure to CB 1954 and NADH was proportional to their levels of the enzyme **DT diaphorase** [NAD(P)H dehydrogenase (quinone), (EC 1.6.99.2)]. It is concluded that NRH, which the authors have shown to be a co-factor for rat **DT diaphorase** (Friedlos et al., Biochem Pharmacol 44; 25-31, 1992), is generated from NADH by enzymes in fetal calf serum, and stimulates the activity of human **DT diaphorase** towards CB 1954.  
ST CB 1954 cytotoxicity reduced pyridine nucleotide; **DT diaphorase** CB 1954 cytotoxicity NADH  
IT **58-68-4**, NADH 110-86-1D, Pyridine, reduced nucleotides

1341-23-7 17720-18-2  
RL: BIOL (Biological study)  
(cytotoxicity of CB 1954 potentiation by,  
DT diaphorase stimulation in, in human cells)

IT 21919-05-1, CB 1954  
RL: PRP (Properties)  
(cytotoxicity of, reduced pyridine nucleotides enhancement of,  
DT diaphorase stimulation in, in human cells)

L17 ANSWER 5 OF 13 CAPLUS COPYRIGHT 2006 ACS on STN  
AB . . . from human, fetal calf and horse sources was capable of driving the bioreductive activation of CB 1954 by the enzyme DT diaphorase. Cell surfaces oxidized NADH or NRH. These observations suggest that NAD(P)H would be unsuitable as a source of reducing equivalent. . .

IT 21919-05-1, CB 1954  
RL: BIOL (Biological study)  
(prodrug, bioreductive activation of, NADPH suitability for)

L17 ANSWER 6 OF 13 CAPLUS COPYRIGHT 2006 ACS on STN  
IT Alkylating agents, biological  
Cytotoxic agents  
(CB 1954, DNA adducts and crosslinking by, in Walker 256 tumor cells,  
DT diaphorase bioactivation in relation to)

IT Deoxyribonucleic acids  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(crosslinking of, with CB 1954, in Walker 256 tumor cells, DT diaphorase bioactivation and cytotoxic activity in relation to)

IT Animal cell line  
(Walker carcinosarcoma, CB 1954 bioactivation by DT diaphorase in, cytotoxic activity and DNA adduct formation and crosslinking in relation to)

IT Deoxyribonucleic acids  
RL: BIOL (Biological study)  
(adducts, with CB 1954, in Walker 256 tumor cells, DT diaphorase bioactivation and cytotoxicity in relation to)

IT Pharmaceutical dosage forms  
(prodrugs, CB 1954 as, in Walker 256 tumor cells, DT diaphorase activation and cytotoxic activity in relation to)

IT 21919-05-1, CB 1954  
RL: BIOL (Biological study)  
(DNA adduct and interstrand crosslink formation, in Walker 256 cells,  
DT diaphorase bioactivation and cytotoxicity in relation to)

L17 ANSWER 7 OF 13 CAPLUS COPYRIGHT 2006 ACS on STN  
TI The differences in kinetics of rat and human DT diaphorase result in a differential sensitivity of derived cell lines to CB 1954 (5-(aziridin-1-yl)-2,4-dinitrobenzamide) [Erratum to document cited in CA115(1):332c].

ST Erratum aziridinyldinitrobenzamide tumor sensitivity DT diaphorase

IT Neoplasm inhibitors  
((aziridinyl)dinitrobenzamide as, tumor sensitivity to, in humans and laboratory animals, DT diaphorase kinetics in relation to (Erratum))

IT 119643-82-2  
RL: FORM (Formation, nonpreparative)  
(formation of, from CB 1954, DT diaphorase of humans and laboratory animals induction of (Erratum))

IT 21919-05-1  
RL: BIOL (Biological study)  
(tumor sensitivity to, of humans and laboratory animals, DT

**diaphorase** kinetics in relation to (Erratum))

- L17 ANSWER 8 OF 13 CAPLUS COPYRIGHT 2006 ACS on STN  
AB . . . the active form of CB 1954 (5-(aziridin-1-yl)-2,4-dinitrobenzamide). This hydroxylamine is formed by the bioredn. of CB 1954 by the enzyme **DT diaphorase** and accounts for the highly selective cytotoxicity of this compound. The reason why the hydroxylamine derivative is so cytotoxic is. . .  
IT 9032-20-6, **DT Diaphorase**  
RL: BIOL (Biological study)  
(CB 1954 bioactivation by, DNA interstrand crosslinking from, thioesters in, cytotoxicity in relation to)  
IT 21919-05-1, CB 1954  
RL: BIOL (Biological study)  
(bioactivation of, DNA-DNA interstrand crosslinking in, thioesters in)  
IT 119643-82-2  
RL: BIOL (Biological study)  
(reaction with DNA of, as **CB 1954** metabolite, thioesters effect on, cytotoxicity in relation to)
- L17 ANSWER 9 OF 13 CAPLUS COPYRIGHT 2006 ACS on STN  
AB . . . cells defective or proficient in excision repair or repair of double strand breaks and/or with normal or reduced levels of **DT-diaphorase** activity is reported to investigate the toxicity of a variety of bioreductive agents under both aerobic and hypoxic conditions. The. . . for any one agent, may differ markedly under aerobic and hypoxic conditions. The studies also show that while the enzyme **DT-diaphorase** plays a major role in determining mitomycin C (MM-C) toxicity under aerobic conditions, this is not true for hypoxic conditions. . .  
IT 9032-20-6, **DT-diaphorase**  
RL: BIOL (Biological study)  
(Chinese hamster cell mutants deficient in, bioreductive agents effect on)  
IT 21919-05-1, CB-1954 27314-97-2, SR-4233  
88876-88-4, RSU-1069  
RL: BIOL (Biological study)  
(DNA repair- and reduction-deficient Chinese hamster cell mutants response to)
- L17 ANSWER 10 OF 13 CAPLUS COPYRIGHT 2006 ACS on STN  
TI The differences in kinetics of rat and human **DT diaphorase** result in a differential sensitivity of derived cell lines to CB 1954 (5-(aziridin-1-yl)-2,4-dinitrobenzamide)  
AB **DT diaphorase** (NAD(P)H dehydrogenase (quinone), EC 1.6.99.2) isolated from Walker 256 rat carcinoma cells can convert CB 1954 to a cytotoxic DNA. . . CB 1954 when compared with other cells which are unable to carry out this reduction. As predicted from their measured **DT diaphorase** activities a number of rat hepatoma and hepatocyte cell lines were also shown to be sensitive to CB 1954. However, no CB 1954-sensitive cell lines of human origin were found, although levels of **DT diaphorase** similar to those in the sensitive rat cells were present in these cells. The human cells were as sensitive as rat cells to the active form of CB 1954 (5-(aziridin-1-yl)-4-hydroxylamino-2-nitrobenzamide). **DT diaphorase**, purified to homogeneity from human Hep G2 cells, did metabolize CB 1954 to this 4-hydroxylamino product, but the rate of. . . 6.4). In addition, CB 1954 could be considered an inhibitor of, rather than a substrate for, the human form of **DT diaphorase**. The purified rat and human **DT diaphorases** possessed otherwise similar biochem. and mol. properties. These findings explain the decreased sensitivity towards CB 1954 of human cell lines. . .  
ST aziridinyl dinitrobenzamide tumor sensitivity **DT**

**diaphorase** kinetics  
 IT Neoplasm inhibitors  
     ((aziridinyl)dinitrobenzamide as, tumor sensitivity to, in humans and  
     laboratory animals, DT **diaphorase** kinetics in relation  
     to)  
 IT **119643-82-2**  
     RL: FORM (Formation, nonpreparative)  
         (formation of, from CB 1954, DT  
         **diaphorase** of humans and laboratory animals induction of)  
 IT **21919-05-1, CB 1954**  
     RL: BIOL (Biological study)  
         (tumor sensitivity to, of humans and laboratory animals, DT  
         **diaphorase** kinetics in relation to)  
  
 L17 ANSWER 11 OF 13 CAPLUS COPYRIGHT 2006 ACS on STN  
 TI Caffeine, aminoimidazolecarboxamide and dicoumarol, inhibitors of NAD(P)H  
     dehydrogenase (quinone) (**DT diaphorase**), prevent both  
     the cytotoxicity and DNA interstrand crosslinking produced by  
     5-(aziridin-1-yl)-2,4-dinitrobenzamide (CB 1954) in Walker cells  
 IT **21919-05-1, CB 1954**  
     RL: BIOL (Biological study)  
         (neoplasm inhibition by and DNA crosslinking from, NAD(P)H  
         dehydrogenase inhibition in relation to)  
  
 L17 ANSWER 12 OF 13 CAPLUS COPYRIGHT 2006 ACS on STN  
 AB . . . as estimated by SDS-polyacrylamide gel electrophoresis, was isolated  
     from Walker cells and identified as a form of NAD(P)H dehydrogenase  
     (quinone) (**DT diaphorase**, EC 1.6.99.2). This enzyme,  
     in the presence of NADH or NADPH, catalyzed the aerobic reduction of CB 1954  
     to 5-(aziridin-1-yl)-4-hydroxylamino-2-nitrobenzamide.. . .  
 IT **119643-82-2**  
     RL: FORM (Formation, nonpreparative)  
         (formation of, as CB 1954 antitumor metabolite)  
 IT **21919-05-1, CB 1954**  
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological  
     study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES  
     (Uses)  
         (neoplasm inhibition by, DNA crosslinking by metabolite in)  
  
 L17 ANSWER 13 OF 13 CAPLUS COPYRIGHT 2006 ACS on STN  
 AB . . . of its 4-nitro group to the corresponding hydroxylamino species.  
     The enzyme was identified as a form of NAD(P)H dehydrogenase (quinone) (  
     **DT diaphorase**, menadione reductase (NMOR), phylloquinone  
     reductase, quinone reductase, EC 1.6.99.2) by comparison of partial  
     protein sequences, coenzymes, substrate and inhibitor specificities,. . .
 .  
 IT **21919-05-1, CB 1954**  
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological  
     study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES  
     (Uses)  
         (neoplasm inhibition by, NADPH dehydrogenase activation of)

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\* available and contains the CA role and document type information. \*  
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=> S 1341-23-7/RN

L19 1 1341-23-7/RN

=> SET NOTICE 1 DISPLAY

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L19 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2006 ACS on STN  
RN 1341-23-7 REGISTRY  
CN Pyridinium, 3-(aminocarbonyl)-1-β-D-ribofuranosyl- (9CI) (CA INDEX  
NAME)

OTHER CA INDEX NAMES:

CN Pyridinium, 3-carbamoyl-1-β-D-ribofuranosyl- (8CI)

OTHER NAMES:

CN 3-Pyridinecarboxamide, 1-β-D-ribosyl-

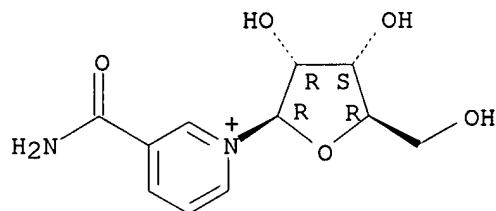
CN Nicotinamide ribonucleoside

CN Nicotinamide ribose

CN Nicotinamide riboside

CN Ribosylnicotinamide  
FS STEREOSEARCH  
DR 19131-72-7, 20299-13-2  
MF C11 H15 N2 O5  
CI COM  
LC STN Files: AGRICOLA, BEILSTEIN\*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA,  
CANCERLIT, CAPLUS, CASREACT, EMBASE, MEDLINE, TOXCENTER, USPATFULL  
(\*File contains numerically searchable property data)  
DT.CA CAplus document type: Conference; Journal; Patent; Report  
RL.P Roles from patents: BIOL (Biological study); USES (Uses)  
RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological  
study); FORM (Formation, nonpreparative); PREP (Preparation); PROC  
(Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses);  
NORL (No role in record)  
RLD.NP Roles for non-specific derivatives from non-patents: BIOL (Biological  
study); PREP (Preparation); PROC (Process); RACT (Reactant or reagent)

Absolute stereochemistry.



74 REFERENCES IN FILE CA (1907 TO DATE)  
4 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
74 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> SET NOTICE LOGIN DISPLAY

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